

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS

FOR THE POLLUTION CONTROL AGENCY

In the Matter of the Proposed Rules
of the Minnesota Pollution Control Agency
Governing Compost Facilities, Minnesota Rules
Chapters 7001 and 7035

**REPORT OF THE
ADMINISTRATIVE LAW JUDGE**

Administrative Law Judge Barbara L. Neilson conducted hearings in this rulemaking proceeding commencing at 9:00 a.m. and 5:30 p.m. on March 24, 2014, at the Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota. The hearings were broadcast via interactive video conference to the regional offices of the Minnesota Pollution Control Agency located in Marshall and Detroit Lakes. The hearings continued until everyone present had an opportunity to be heard concerning the proposed rules.

The hearings and this Report are part of a rulemaking process governed by the Minnesota Administrative Procedure Act.¹ The legislature has designed the rulemaking process to ensure that state agencies have met all the requirements that Minnesota law specifies for adopting rules. Those requirements include assurances that the proposed rules are necessary and reasonable and that any modifications that the agency made after the proposed rules were initially published do not result in the rules being substantially different from what the agency originally proposed. The rulemaking process also includes a hearing when a sufficient number of persons request one or when ordered by the agency. The hearing is intended to allow the agency and the Administrative Law Judge reviewing the proposed rules to hear public comment regarding the impact of the proposed rules and what changes might be appropriate.

Jean Coleman, Staff Attorney, represented the Minnesota Pollution Control Agency (MPCA or Agency) at the hearing. The members of the MPCA's hearing panel included Yolanda Letnes, Rulemaking Coordinator; David Benke, Director of the MPCA's Resource Management and Assistance Division (RMAD); Mike Mondloch, Supervisor of the Solid Waste Permitting Unit of RMAD; Lisa Mojsiej, Permitting Engineer in the Solid Waste Permitting Unit; Anthony Bello, Engineering Specialist Senior in the Solid Waste Permitting Unit; Mark Rust, Supervisor of the MPCA's Sustainable Materials Management Unit; and Timothy Farnan, Organics and Recycling

¹ Minn. Stat. §§ 14.131 through 14.20.

Specialist in the Sustainable Materials Management Unit. Approximately forty people attended the hearings. A total of twenty-five individuals signed the hearing registers.

The Agency received numerous written comments on the proposed rules prior to the hearing. After the hearing, the Administrative Law Judge kept the administrative record open for an additional twenty calendar days, until April 14, 2014, to allow interested persons and the Agency to submit written comments. Thereafter, the record remained open for an additional five business days, until April 21, 2014, to allow interested persons and the Agency to file a written response to any comments received during the initial comment period.² Approximately 112 written pre-hearing and post-hearing comments from members of the public were received and considered during the rulemaking process, along with two responses from the Agency. To aid the public in participating in this matter, comments were posted on the Agency's website shortly after they were received. The hearing record closed for all purposes on April 21, 2014.³

NOTICE

The Agency must make this Report available for review by anyone who wishes to review it for at least five working days before the Agency takes any further action to adopt final rules or to modify or withdraw the proposed rules. If the Agency makes changes in the rules other than those recommended in this report, it must submit the rules, along with the complete hearing record, to the Chief Administrative Law Judge for a review of those changes before it may adopt the rules in final form.

Because the Administrative Law Judge has determined that the proposed rules are defective in certain respects, state law requires that this Report be submitted to the Chief Administrative Law Judge for her approval. If the Chief Administrative Law Judge approves the adverse findings contained in this Report, she will advise the Agency of actions that will correct the defects, and the Agency may not adopt the rules until the Chief Administrative Law Judge determines that the defects have been corrected. However, if the Chief Administrative Law Judge identifies defects that relate to the issues of need or reasonableness, the Agency may either adopt the actions suggested by the Chief Administrative Law Judge to cure the defects or, in the alternative, submit the proposed rules to the Legislative Coordinating Commission for the Commission's advice and comment. The Agency may not adopt the rules until it has received and considered the advice of the Commission. However, the Agency is not required to wait for the Commission's advice for more than 60 days after the Commission has received the Agency's submission.

If the Agency elects to adopt the actions suggested by the Chief Administrative Law Judge and make no other changes and the Chief Administrative Law Judge determines that the defects have been corrected, it may proceed to adopt the rules. If the Agency makes changes in the rules other than those suggested by the Administrative Law Judge and the Chief Administrative Law Judge, it must submit

² See Minn. Stat. § 14.15, subd. 1.

³ The Chief Administrative Law Judge extended the time period for issuance of the Administrative Law Judge's Report on this rule.

copies of the rules showing its changes, the rules as initially proposed, and the proposed order adopting the rules to the Chief Administrative Law Judge for a review of those changes before it may adopt the rules in final form.

After adopting the final version of the rules, the Agency must submit them to the Revisor of Statutes for a review of their form. If the Revisor of Statutes approves the form of the rules, the Revisor will submit certified copies to the Administrative Law Judge, who will then review them and file them with the Secretary of State. When they are filed with the Secretary of State, the Administrative Law Judge will notify the Agency, and the Agency will notify those persons who requested to be informed of their filing.

Based upon all the testimony, exhibits, and written comments, the Administrative Law Judge makes the following:

FINDINGS OF FACT

Nature of the Proposed Rules

1. In this rulemaking proceeding, the Agency proposes to amend its rules relating to solid waste management. The current rules are designed for facilities composting a mixture of organic and inorganic wastes, known as mixed municipal solid waste (MMSW).⁴ The rules relating to permits for such facilities are located in Minnesota Rules Chapter 7001. The rules relating to facility design, construction and operation are located in Minnesota Rules Chapter 7035.

2. The proposed amendments relate specifically to Source-Separated Organic Materials (SSOM), which are organic materials that are separated at the source by waste generators for the purpose of preparing them for use as compost.⁵ SSOM differs from MMSW because it is collected separately and generally includes only a specific portion of the organic waste stream.

3. In the Statement of Need and Reasonableness, the MPCA indicated that local government and industry representatives suggested that it amend the current rules to streamline requirements and support efforts to increase composting. After reviewing

⁴ MMSW is defined to mean “garbage, refuse, and other solid waste from residential, commercial, industrial, and community activities that the generator of the waste aggregates for collection” but does not include “auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters, and other materials collected, processed, and disposed of as separate waste streams.” See Minn. Stat. § 115A.03, subd. 21, and Minn. R. 7035.0300, subp. 63.

⁵ The proposed rules define SSOM to mean source-separated compostable materials and yard waste as defined under Minn. Stat. § 115A.03 (except sanitary products and diapers); vegetative wastes generated from industrial or manufacturing process that prepare food for human consumption, and compostable materials that meet certain standards established by the American Society for Testing and Materials. SSOM generally does not include animal wastes, fish wastes, meat by-products, sanitary products, diapers, septage, or sewage sludge. See proposed rule part 7035.0300, subp. 105a.

the existing regulations and practices in other states, the MPCA agreed that certain regulatory changes are appropriate.⁶

4. The Agency is proposing rule amendments that will apply different standards for the construction, design, location and operation of facilities composting SSOM than for facilities composting MMSW. The proposed rule amendments also create a new category for small compost sites; and, where appropriate, allow SSOM compost facilities to operate under an extended permit if no major modifications are planned. Other revisions to the current rules are proposed to clarify requirements and update language.⁷

5. During this rulemaking proceeding, the MPCA has modified the proposed rules in several respects. Perhaps most significantly, the Agency reinstated the exception for “backyard compost sites” but proposes to limit the definition to a site used to compost food scraps, garden wastes, lawn cuttings, leaves, and prunings “from a single family or household” (and eliminate the language in the current rule that includes “apartment buildings or a single commercial office, a member of which is the owner, occupant, or lessee of the property”).⁸ These modifications will be discussed further in the rule-by-rule analysis below.

Rulemaking Legal Standards

6. Under Minnesota law, one of the determinations that must be made in a rulemaking proceeding is whether the agency has established the need for and reasonableness of the proposed rules by an affirmative presentation of facts.⁹ In support of a rule, an agency may rely on legislative facts, namely general facts concerning questions of law, policy and discretion, or it may simply rely on interpretation of a statute, or stated policy preferences.¹⁰ The MPCA prepared a Statement of Need and Reasonableness (SONAR) in support of its proposed rules. At the hearing, the Agency primarily relied upon the SONAR as its affirmative presentation of facts in support of the proposed rules. The SONAR was supplemented by the MPCA’s written post-hearing submissions and by comments made by members of the Agency Panel during the public hearing.

7. The question of whether a rule has been shown to be reasonable focuses on whether it has been shown to have a rational basis, or whether it is arbitrary, based upon the rulemaking record. Minnesota case law has equated an unreasonable rule with an arbitrary rule.¹¹ Arbitrary or unreasonable agency action is action without

⁶ SONAR at 43-44.

⁷ SONAR at 4-5, 44.

⁸ See Proposed Rule Revisions appended as Attachment 2 to the MPCA’s Initial Post-Hearing Comments (April 14, 2014).

⁹ Minn. Stat. § 14.14, subd. 2; Minn. R. 1400.2100.

¹⁰ *Mammenga v. Dept. of Human Services*, 442 N.W.2d 786 (Minn. 1989); *Manufactured Hous. Inst. v. Pettersen*, 347 N.W.2d 238, 244 (Minn. 1984).

¹¹ *In re Hanson*, 275 N.W.2d 790 (Minn. 1978); *Hurley v. Chaffee*, 231 Minn. 362, 43 N.W.2d 281, 284 (1950).

consideration and in disregard of the facts and circumstances of the case.¹² A rule is generally found to be reasonable if it is rationally related to the end sought to be achieved by the governing statute.¹³ The Minnesota Supreme Court has further defined an agency's burden in adopting rules by requiring it to "explain on what evidence it is relying and how the evidence connects rationally with the agency's choice of action to be taken."¹⁴

8. Reasonable minds might be divided about the wisdom of a certain course of action. An agency is legally entitled to make choices between possible approaches so long as its choice is rational. It is not the role of the Administrative Law Judge to determine which policy alternative presents the "best" approach, since this would invade the policy-making discretion of the agency. The question is, rather, whether the choice made by the agency is one that a rational person could have made.¹⁵

9. In addition to need and reasonableness, the Administrative Law Judge must also assess whether the Agency complied with the rule adoption procedure, whether the proposed rules grant undue discretion, whether the Agency has statutory authority to adopt the rules, whether the rules are unconstitutional or illegal, whether the rules involve an undue delegation of authority to another entity, and whether the proposed language is not a rule.¹⁶

10. If changes to the proposed rule are made by the Agency or suggested by the Administrative Law Judge after original publication of the rule language in the State Register, it is also necessary for the Administrative Law Judge to determine if the new language is substantially different from that which was originally proposed. The standards to determine whether changes to proposed rules create a substantially different rule are found in Minn. Stat. § 14.05, subd. 2. The statute specifies that a modification does not make a proposed rule substantially different if the differences are within the scope of the matter announced in the notice of hearing and are in character with the issues raised in that notice; the differences are a logical outgrowth of the contents of the notice of hearing and the comments submitted in response to the notice; and the notice of hearing provided fair warning that the outcome of that rulemaking proceeding could be the rule in question.¹⁷

11. In reaching a determination regarding whether modifications result in a rule that is substantially different, the Administrative Law Judge is to consider whether persons who will be affected by the rule should have understood that the rulemaking proceeding could affect their interests; whether the subject matter of the rule or issues determined by the rule are different from the subject matter or issues contained in the

¹² *Greenhill v. Bailey*, 519 F.2d 5, 19 (8th Cir. 1975).

¹³ *Mammenga*, 442 N.W.2d at 789-90; *Broen Mem'l Home v. Minnesota Dept. of Human Services*, 364 N.W.2d 436, 444 (Minn. Ct. App. 1985).

¹⁴ *Manufactured Hous. Inst. v. Pettersen*, 347 N.W.2d at 244.

¹⁵ *Federal Sec. Adm'r v. Quaker Oats Co.*, 318 U.S. 218, 233 (1943).

¹⁶ Minn. R. 1400.2100.

¹⁷ Minn. Stat. §14.05, subd. 2(b).

notice of hearing; and whether the effects of the rule differ from the effects of the proposed rule contained in the notice of hearing.¹⁸

Procedural Requirements of Chapter 14

12. The Minnesota Administrative Procedure Act¹⁹ and the rules of the Office of Administrative Hearings²⁰ set forth certain procedural requirements that are to be followed during agency rulemaking.

13. On July 26, 2010, the Agency published a Request for Comments on Possible Amendments to Rules Governing Compost Facilities in the State Register. The Request for Comments was published at 35 State Reg. 106.²¹

14. On October 17, 2011, the Agency published an additional Request for Comments on Possible Amendments to Rules Governing Compost Facilities in the State Register. The second Request for Comments was published at 36 State Reg. 442.²²

15. On November 8, 2013, the Agency sent a letter to the Commissioner of Minnesota Management & Budget enclosing copies of the proposed rule and the SONAR, and requested an evaluation of the fiscal impact and benefits of the proposed rules on local units of government, as required by Minn. Stat. § 14.131.²³

16. On November 8, 2013, the Agency also sent letters to the Commissioner of Agriculture and the Commissioner of Transportation enclosing copies of the proposed rules and the SONAR. The letters noted that the MPCA does not believe this rulemaking will be of any special concern regarding agriculture or transportation.²⁴

17. On November 21, 2013, Michelle Mitchell, Executive Budget Officer for Minnesota Management & Budget (MMB), notified the Agency that she had completed her review regarding the fiscal impact of the proposed rules with respect to local governments. Ms. Mitchell concluded that the proposed rules will likely result in reduced costs for composting facilities and determined that the MPCA “has adequately analyzed and presented the potential financial impact of the proposed rule changes.”²⁵

18. On November 25, 2013, the Agency filed with the Office of Administrative Hearings a proposed notice of its intent to adopt the rules without a public hearing unless 25 or more persons request a hearing, and its intent to adopt the rules with a public hearing if a sufficient number of persons requested a hearing (Dual Notice). The

¹⁸ Minn. Stat. § 14.05, subd. 2I.

¹⁹ The provisions of the Act relating to agency rulemaking are codified in Minn. Stat. §§ 14.001-14.47.

²⁰ The OAH rules governing rulemaking proceedings are set forth in Minn. R. 1400.2000 through 1400.2240.

²¹ Ex. 1 at 1-2.

²² *Id.* at 3-4.

²³ Ex. 8a at ¶ 5; Ex. 8m.

²⁴ Ex. 8k; Ex. 8l.

²⁵ Ex. 8m.

Agency also filed a copy of the proposed rules and a draft of the SONAR and requested approval of its Additional Notice Plan.

19. On December 6, 2013, and December 9, 2013, the MPCA submitted revised versions of its Additional Notice Plan and Dual Notice.

20. On December 10, 2013, the undersigned Administrative Law Judge approved the Agency's revised Additional Notice Plan. The revised Dual Notice of Hearing was also approved.

21. On January 3, 2014, the Agency electronically sent a copy of the SONAR to the Legislative Reference Library as required by law.²⁶

22. On January 3, 2014, the Agency mailed the Dual Notice, a one-page summary of the Dual Notice, and the proposed rules to all persons and associations on its Rulemaking List. On January 6, 2014, the Agency sent an electronic notice with a hyperlink to electronic copies of these materials via e-mail to all persons and associations on the Agency's rulemaking mailing list.²⁷

23. On January 3, 2014, the MPCA sent the Dual Notice and proposed rules to nine permitted facilities and 41 counties and cities involved in source reduction and recycling and, on January 6, 2014, the Agency sent an electronic notice that included a direct link to the MPCA's public notice web page (which, in turn, contained links to the proposed rules, Dual Notice and SONAR) to the remainder of the individuals and groups listed in its Additional Notice Plan.²⁸

24. On January 6, 2014, the Agency mailed a cover letter with a hyperlink to electronic copies of the Dual Notice, SONAR and the proposed rules to the Legislative Coordinating Commission and the Chairs and Ranking Minority Members of the Senate and House legislative policy and budget committees with jurisdiction over the subject matter of the proposed rule amendments.²⁹

25. On January 6, 2014, the MPCA published the Dual Notice and the proposed rules in the State Register at 38 State Reg. 973.³⁰

26. Numerous comments were received after publication of the Dual Notice and the proposed rules. More than 25 persons requested that a hearing be held on the proposed rules.³¹

²⁶ Ex. 5.

²⁷ Ex. 7.

²⁸ Ex. 8a, ¶¶ 3 and 4.

²⁹ Ex. 8a, ¶ 1; Ex. 8b (incorporating actual mailing date as clarified in the MPCA's Exhibits Index).

³⁰ Ex. 6.

³¹ See Ex. 9 and separate tabbed notebook of public comments.

27. On March 12, 2014, the Agency notified all persons who had requested a hearing that hearings would in fact be held.³²

28. The hearings on the proposed rules were held on March 24, 2014, in St. Paul, Minnesota, and broadcast via interactive video conference to the Agency's regional offices in Marshall and Detroit Lakes. During the hearing, the following documents were received into the hearing record:

- A. the Request for Comments as published in the State Register on July 26, 2010 (35 State Reg. 106), and October 17, 2011 (36 State Reg. 442);³³
- B. a copy of the proposed rules dated October 17, 2013, including the Revisor's approval;³⁴
- C. a copy of the SONAR;³⁵
- D. a copy of the transmittal letter and e-mail transmission demonstrating that the Agency sent a copy of the SONAR to the Legislative Reference Library on January 3, 2014;³⁶
- E. a copy of the dual Notice as signed by the Commissioner of the MPCA on December 10, 2013, as mailed, and as posted to the MPCA Public Notice webpage;³⁷
- F. a copy of the short summary of the Dual Notice dated December 6, 2013, as mailed and as posted to the MPCA Public Notice webpage;³⁸
- G. a copy of the notice of the Compost Rule Dual Notice as e-mailed to counties and cities involved in source reduction and recycling, permitted solid waste management facilities, and other entities on December 6, 2014, in accordance with the Additional Notice Plan;³⁹
- H. a copy of the Notice of Compost Rule Dual Notice as e-mailed to all subscribers to the Compost Rule GovDelivery Service on January 6, 2014;⁴⁰
- I. a copy of a screenshot of the MPCA Compost Rule webpage showing that the Dual Notice was posted on January 6, 2014;⁴¹

³² Ex. 11.

³³ Ex. 1.

³⁴ Ex. 3.

³⁵ Ex. 4.

³⁶ Ex. 5.

³⁷ Ex. 6a.

³⁸ Ex. 6b.

³⁹ Ex. 6c.

⁴⁰ Ex. 6d.

⁴¹ Ex. 6e.

- J. a copy of the Agency's Dual Notice as published in the State Register on January 6, 2014 (38 State Reg. 973);⁴²
- K. certificates attesting to the accuracy of the Agency's mailing list and attesting that the Dual Notice was sent via U.S. mail or electronically to all persons and associations on the Agency's rulemaking list on January 3 and January 6, 2014;⁴³
- L. certificates attesting that notice was given to legislators on January 6, 2014;⁴⁴
- M. certificates attesting that notice was given in accordance with the Additional Notice Plan on January 3 and January 6, 2014;⁴⁵
- N. copies of letters providing notice to the Commissioner of Agriculture and the Commissioner of Transportation sent on November 8, 2013;⁴⁶
- O. copies of the Agency's letter dated November 3, 2013, seeking consultation with MMB and memorandum received in response dated November 21, 2013;⁴⁷
- P. copies of written comments on the proposed rule received during the comment period;⁴⁸
- Q. a certificate attesting that notice confirming that a hearing would be held was (1) mailed or e-mailed on March 12, 2014, to the majority of those who requested a hearing; (2) e-mailed on March 18, 2014, to two persons because one had been overlooked in the initial e-mailing due to the volume of letters and the other had a typographical error in his or her e-mail address; and (3) mailed on March 19, 2014, to one person who had requested a hearing but had been overlooked in the first mailing due to the volume of letters;⁴⁹
- R. a copy of MPCA's revisions to the proposed rules as of the date of the hearing;⁵⁰
- S. a copy of the slide presentation made by the MPCA during the hearing;⁵¹

⁴² Ex. 6f.

⁴³ Exs. 7a and 7b.

⁴⁴ Ex. 8b.

⁴⁵ Exs. 8a, 8f, 8g, 8h, 8i, and 8j.

⁴⁶ Ex. 8k and 8l.

⁴⁷ Exs. 8m.

⁴⁸ Ex. 9 and separate binder.

⁴⁹ Ex. 11.

⁵⁰ Ex. 13.

⁵¹ Ex. 14.

- T. a list of studies reviewed by the MPCA during the development of the proposed rules;⁵² and
- U. additional information regarding how the research the MPCA funded for Carver County was considered in the development of the proposed rules; why the Agency reduced the number of allowable soil types from nine to six; how the Agency will determine which alternative liner systems will be approved; why the Agency selected a distance of five feet to the water table and a distance of 500 feet of horizontal separation to the nearest residence, place of business, or public area; why the Agency selected the definition of “water table” included in the proposed rules; and the Agency’s reasons for the location requirements included in the proposed rules.⁵³

29. The Administrative Law Judge finds that the Agency has met the procedural requirements imposed by applicable law and rules.

Additional Notice

30. Minn. Stat. §§ 14.131 and 14.23 require that the SONAR contain a description of the Agency’s efforts to provide additional notice to persons who may be affected by the proposed rules.

31. In its SONAR, the Agency indicated that it had published a Request for Comments on the proposed rules in the State Register on July 26, 2010, and launched a webpage to keep interested and affected parties apprised of the status of the process. Agency staff met with stakeholders on November 19, 2010, to obtain feedback on a concept proposal. This meeting was webcast and archived for viewing. Another meeting was held between MPCA staff and stakeholders on October 12, 2011, at the Recycling Association of Minnesota/Solid Waste Association of North America Conference to obtain feedback on the MPCA’s preliminary draft rule. This meeting was free and open to the public.

32. On October 17, 2011, the MPCA published a second Request for Comments in the State Register and posted the information on its website. Agency staff met with stakeholders on February 10, 2012, and sought further clarification on key issues. On October 19, 2012, the MPCA released a second preliminary draft of the proposed rules and provided a 28-day informal comment period.

33. As noted above, the Agency certified that it had provided notice of the proposed rules to all individuals and organizations included on the Agency’s rulemaking mailing list as well as to the persons and entities identified in its revised Additional Notice Plan that was approved by the Administrative Law Judge on December 10, 2013. The Additional Notice Plan included the Association of Minnesota Counties; the Association of Recycling Managers; the League of Minnesota Cities; the Minnesota Association of Townships; the Minnesota Composting Council; the Recycling

⁵² Ex. 15.

⁵³ Ex. 16.

Association of Minnesota; the Solid Waste Association of North America; the Minnesota Solid Waste Administrators Association; 134 permitted solid waste management facilities; and various counties and cities involved in source reduction and recycling.⁵⁴

34. The Agency also created a website dedicated to the proposed rules. The website has separate links to the text of the proposed rules, the SONAR, hearing exhibits, and post-hearing comments filed by the Agency and members of the public in this proceeding.⁵⁵

35. The Administrative Law Judge finds that the Agency has fulfilled its additional notice requirements.

Statutory Authority

36. The Agency relies upon Minn. Stat. § 116.07, subd. 4(b), as the source of its statutory authority to adopt and implement these rules.⁵⁶ This statute, which was enacted prior to January 1, 1996,⁵⁷ states:

Pursuant and subject to the provisions of chapter 14, and the provisions hereof, the Pollution Control Agency may adopt, amend, and rescind rules and standards having the force of law relating to any purpose within the provisions of Laws 1969, chapter 1046, for the collection, transportation, storage, processing, and disposal of solid waste and the prevention, abatement, or control of water, air, and land pollution which may be related thereto, and the deposit in or on land of any other material that may tend to cause pollution. . . . Without limitation, rules or standards may relate to collection, transportation, processing, disposal, equipment, location, procedures, methods, systems or techniques or to any other matter relevant to the prevention, abatement or control of water, air, and land pollution which may be advised through the control of collection, transportation, processing, and disposal of solid waste and sewage sludge, and the deposit in or on land of any other material that may tend to cause pollution. . . .⁵⁸

37. The Administrative Law Judge concludes that the Agency has statutory authority to adopt the proposed rules.

⁵⁴ See Exs. 7 and 8.

⁵⁵ <http://www.pca.state.mn.us/index.php/waste/waste-permits-and-rules/waste-rulemaking/proposed-changes-to-compost-rules.html>.

⁵⁶ SONAR at 6.

⁵⁷ If a law authorizing or requiring an agency to adopt, amend, or repeal rules became effective after January 1, 1996, the agency must publish a notice of intent to adopt the rules or a notice of hearing within eighteen months of the effective date of the authorizing statute or lose its rulemaking authority. Minn. Stat. § 14.125. Because the MPCA's authority to adopt rules governing solid waste existed prior to January 1, 1996, the time limit does not apply here.

⁵⁸ Minn. Stat. § 116.07, subd. 4(b).

Impact on Farming Operations

38. Minn. Stat. § 14.111 requires that notice be given to the Commissioner of Agriculture when rules are proposed that affect farming operations. In addition, where proposed rules affect farming operations, Minn. Stat. § 14.14, subd. 1b, requires that at least one public hearing be conducted in an agricultural area of the state.

39. The Agency does not expect that the proposed rules will affect farming operations or agricultural land.⁵⁹ However, the Agency did provide notice to the Commissioner of Agriculture more than thirty days before the proposed rules were published in the State Register,⁶⁰ and the hearings in this matter were broadcast to MPCA regional offices located in agricultural areas. As a result, the Administrative Law Judge concludes that the Agency has complied with Minn. Stat. § 14.14, subd. 1b.

Impact on Chicano/Latino People

40. If proposed rules have their primary effect on Chicano/Latino people, the agency is required by Minn. Stat. § 3.9223, subd. 4, to submit them to the State Council on Affairs of Chicano/Latino People for review and recommendation at least fifteen days before their initial publication in the State Register. The MPCA indicated in the SONAR that it would not provide notice to the State Council because the proposed rules are not expected to have a primary effect on Chicano/Latino people.⁶¹

41. Because there is no indication that the MPCA's proposed rules will primarily affect Chicano/Latino people, the Administrative Law Judge concludes that the MPCA was not required to give notice to the State Council under Minn. Stat. § 3.9223, subd. 4.

Notice to the Commissioner of Transportation

42. Before public hearings on any MPCA rule concerning transportation, the MPCA is required by Minn. Stat. § 174.05 to inform the Commissioner of Transportation of the proposed rules in order to afford the Commissioner of Transportation an opportunity to submit a written review of the rules (including an analysis of their impact upon the state's transportation system) and propose alternative rules or standards.

43. The Agency does not expect that the proposed rules will have an impact on transportation.⁶² However, the Agency did provide notice to the Commissioner of Transportation more than four months prior to the public hearing on the proposed rules.⁶³ As a result, the Administrative Law Judge concludes that the Agency has complied with Minn. Stat. § 174.05.

⁵⁹ SONAR at 56.

⁶⁰ Ex. 8k.

⁶¹ SONAR at 57.

⁶² SONAR at 57.

⁶³ Ex. 8l.

Regulatory Analysis in the SONAR

44. Minn. Stat. § 14.131 requires an agency adopting rules to consider eight factors in its Statement of Need and Reasonableness. Each of these factors, and the Agency's analysis, are discussed below.

Section 14.131(1)

45. The first factor requires "a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule."

46. In its SONAR, the MPCA indicated that the classes of persons who will potentially be affected by the proposed rule changes include residential and commercial generators of food waste, yard waste or non-recyclable paper; persons who prepare, distribute or land-apply compost in Minnesota (i.e., small and large municipalities or political subdivisions and private persons); Minnesota citizens; and the MPCA.⁶⁴

47. The Agency emphasized that the proposed rules will allow SSOM compost facilities to be permitted with different standards than composting facilities accepting MMSW, biosolids or other materials that do not constitute SSOM. The MPCA believes that the proposed rules will benefit the Agency and regulated parties by reducing the costs to the public or persons who compost SSOM while still ensuring appropriate environmental protection. According to the Agency, the proposed rules will benefit the MPCA by decreasing the amount of staff resources spent in re-permitting facilities that are not making major modifications and instead allowing staff resources to be shifted to higher priority permitting projects and enforcing existing permits and rules. The MPCA asserted that the proposed rules will also benefit regulated parties because they will not need to go through the permit reissuance process unless major changes are planned.⁶⁵

48. The MPCA also noted that persons currently operating backyard compost sites would be allowed to continue or possibly expand existing operations without having to obtain a permit, as long as certain requirements are met, and that the proposed rules' creation of a new category called the "small compost site" would provide more flexibility than existing rules.⁶⁶

Section 14.131(2)

49. The second factor requires consideration of "the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues."

⁶⁴ SONAR at 44.

⁶⁵ *Id.* at 45.

⁶⁶ *Id.* at 44-45.

50. In the SONAR, the Agency stated that the proposed rules should not have a significant impact on state revenue because there are no new fees being created or repealed and municipalities and the MPCA already administer the processes that are being incorporated into the rules. It reiterated that the proposed rules are intended to streamline the process of regulating SSOM compost facilities and will allow the Agency to devote more resources to providing technical assistance, performing on-site inspections, and conducting more comprehensive compliance determinations.⁶⁷

51. Because the MPCA already has compost rules in place and the rule amendments will not increase the Agency's workload, it anticipates that there will be no significant changes in costs associated with the proposed rules.⁶⁸

Section 14.131(3)

52. The third factor requires "a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule."

53. In the SONAR, the Agency asserted that the proposed rules have two primary purposes: first, to decrease administrative costs associated with permitting for both the MPCA and the regulated community; and second, to create more appropriate technical standards for SSOM compost facilities and expand the definition of a "backyard compost site" to provide more flexibility.⁶⁹

54. The MPCA stated that one alternative to the permitting amendments contained in the proposed rules would be to continue the current permitting system. The Agency indicated that such an approach would not lead to any major savings for regulated parties or the MPCA and would appear to involve increased costs over the proposed rules. The Agency noted that the impetus for providing the extended permit process came from affected parties and that stakeholders had not expressed any concerns about that portion of the rules. As a result, the MPCA concluded that the proposed rule changes were not regarded by stakeholders as being intrusive.⁷⁰

55. The Agency identified three alternative methods to achieve updated technical and operations standards at SSOM facilities: First, it noted that the standards could be included as special conditions in permits rather than placed into the rules. The MPCA acknowledged that this would avoid the costs of the current rulemaking proceeding, but would merely shift that cost to permitting because the MPCA would need to negotiate each condition with each permittee.⁷¹

56. Second, the MPCA stated that it could allow facilities to operate under a demonstration project permit. Demonstration projects are typically three-year projects with a possible short-term extension that are designed to gather information relating to

⁶⁷ *Id.* at 45.

⁶⁸ *Id.*

⁶⁹ *Id.* at 45-46.

⁷⁰ *Id.* at 45-46.

⁷¹ *Id.* at 46.

future design or operating conditions for that specific type of facility. The MPCA noted that it has issued demonstration project permits to SSOM compost facilities in the past. It believes that the data-gathering function of such demonstration project has been met and does not believe it is appropriate to continue issuing or extending them.⁷²

57. Finally, the Agency indicated that it could try to convince facility owners to comply on a voluntary basis rather than adopting rules. However, the Agency pointed out that voluntary standards are not enforceable and predicted that not all affected facilities would fully adopt the voluntary standards.⁷³

58. As an alternative to changing the definition and requirements for a “backyard compost site,” the Agency stated that such facilities could be required to seek a full permit. It determined that it would not be appropriate to do so, since full permits are costly, the amount of composting at such a site is small, certain items are not accepted, and the environmental risk is minimal. The SONAR indicates that the proposed rule “seeks to balance the need for increased flexibility for composting SSOM at small compost sites with the need to protect human health and the environment.”⁷⁴

Section 14.131(4)

59. The fourth factor requires “a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule.”

60. The Agency stated in the SONAR that it considered the alternatives discussed under the third factor and rejected them. In the view of the Agency, the system in the proposed rule of extended permits and the revisions to the standards and “backyard compost site” provide the best approach to meet the needs of the MPCA and regulated community.⁷⁵

Section 14.131(5)

61. The fifth factor specifies that the Agency must assess “the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals.”

62. The SONAR includes a lengthy discussion of the probable costs imposed under the existing rules compared to the probable costs under the proposed amendments based upon four scenarios.⁷⁶

63. The first scenario compared the backyard compost site exemption included in the existing rules with the approach that was initially taken under the

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.* at 46-47.

⁷⁶ *Id.* at 47-53.

proposed rules (i.e., deleting the backyard compost site exemption and incorporating a new small compost site exemption in the proposed rules).⁷⁷ As noted above, the Agency modified the proposed rules after the SONAR was created to reinstate the backyard compost site exemption.⁷⁸

64. In the SONAR, the MPCA noted that the existing rules do not allow certain types of composting operations to accept SSOM without a Solid Waste Compost Permit and restrict the materials that may be composted to food scraps and yard waste. In contrast, the MPCA indicated that the proposed amendments to the rules would expand the specific materials that can be composted to include poultry litter generated on site (if the compost produced is used only on site), non-recyclable paper, or compostable materials that meet certain standards set by the American Society of Testing and Materials (ASTM).⁷⁹

65. In addition, the Agency stated that the proposed rules will allow small operations that qualify under the small compost site exemption to avoid incurring the expense of applying for a permit to commence composting operations. The Agency indicated that the proposed rules generally decrease costs because a permit is not required and the amendments allow more flexibility in the materials that can be accepted. It noted that one community gardening group estimated that the costs it incurred in developing and submitting a permit application were approximately \$1,200, and stated that such costs could be avoided under the proposed revisions.⁸⁰

66. According to the Agency, defining a greater range of materials as acceptable for processing at a small compost site could result in cost savings to the residential or commercial generator because they may be able to reduce the size of their trash container or decrease the frequency of collection. The Agency does not expect added costs under the proposed rules for persons who prepare, distribute, or land-apply compost in Minnesota and believes that, for certain classes of compost facilities, there would be cost reductions. Finally, the MPCA indicated in the SONAR that Agency costs associated with permitting would be reduced because small compost facilities would not be required to obtain a permit.⁸¹

67. The second scenario compared the existing rules (which require any facility that wishes to compost SSOM to obtain a Solid Waste Compost facility permit and essentially design and operate to MMSW standards) to the approach taken in the proposed rules (under which a new class is created for facilities that wish to compost SSOM, with modified operation and design standards).⁸²

⁷⁷ *Id.* at 47-49.

⁷⁸ See discussion of revisions to proposed rules parts 7035.0300, subp. 7, and 7035.3535, subp. 2, in Findings 156-165 and 207-213 below.

⁷⁹ SONAR at 48.

⁸⁰ *Id.* at 48-49.

⁸¹ *Id.* at 49.

⁸² *Id.* at 47, 49-51.

68. The Agency noted in the SONAR that the single most expensive MMSW design requirement is ensuring that the pad on which the active composting occurs meets the specified impermeable standard. The MPCA noted that a landfill project estimated that it would cost approximately \$350,500 to install a clay barrier layer and 60-mil high density polyethylene geomembrane over a two-acre area, and a solid waste compost facility recently spent more than \$209,000 to construct a 1.4-acre concrete pad.⁸³

69. The proposed rule changes the requirements for the compost pad and also allows the later stages of composting (curing and storage) to take place off the pad. For SSOM compost sites that meet certain soil types and separation-to-ground-water distance, only a hard-packed, all-weather surface would be required instead of an impermeable surface. The MPCA estimated that the site evaluation and soil characterization costs would be approximately \$10,000 per site and that compaction of on-site soils for a two-acre site would cost about \$10,000. The Agency noted that, if the surface soils were not adequate for the hard-packed, all-weather surface, additional aggregate would need to be brought in and compacted, and estimated that the cost to construct a two-acre pad in such a facility would be approximately \$39,000. According to the MPCA, even if the facility was required to install a geomembrane or impermeable compost pad, the cost of installing such a liner or pad would be less under the proposed rules since it would only be needed on the tipping, mixing, active composting area rather than the whole site.⁸⁴

70. Overall, the Agency expects that the proposed amendments to the rules would result in cost reductions for owners and operators who are able to select a site that meets the siting criteria. The MPCA expects that Minnesota citizens using compost facilities that are able to meet the siting requirements may also experience decreases in costs under the proposed revisions, such as reduced tipping fees for organic waste delivered to the facility. The Agency also believes that the proposed rules would support community efforts to increase composting. It expects that MPCA costs will not increase if the proposed rules are adopted and, in fact, may slightly decrease.⁸⁵

71. The third scenario compared the approach in the existing and proposed rules relating to demonstration projects for facilities that wish to compost SSOM. Currently, any facility can request to undertake a demonstration project using SSOM. Demonstration projects are typically three-year projects with a possible short-term extension. The proposed amendments to the rule would not change this option. For that reason, there are no expected increased costs associated with the proposed rules in terms of impact on demonstration projects. However, the Agency noted in the SONAR that there may be less need to issue demonstration project permits if the proposed rules are adopted because facilities may prefer to submit a SSOM permit project request.⁸⁶

⁸³ *Id.* at 49.

⁸⁴ *Id.* at 49-50.

⁸⁵ *Id.* at 40-51.

⁸⁶ *Id.* at 51.

72. The fourth scenario compared the requirements of the existing rules (which require facilities to obtain an initial permit and re-permit every five years) to the approach taken under the proposed amendments (which would allow facilities to obtain an initial permit followed by an extended permit).⁸⁷

73. In the SONAR, the Agency indicated that owners or operators of sites composting SSOM may currently incur costs associated with permit consultants as well as costs for designing and building the facility, and stated that those costs will remain under the amended rules. However, the Agency indicated that a consultant may not be required for submitting the permit extension notification form allowed under the proposed rules.⁸⁸

74. The MPCA noted that, under current rules, a small compost facility would be required to obtain a permit if it was unable to meet the backyard compost site exemption. The MPCA indicated that the cost for the Agency to process an initial permit is approximately \$3,200. Under the proposed rule amendments, a small compost site would not be required to obtain a permit if it fell within the exemption. The MPCA indicated that this would result in cost savings for both the Agency and the compost facility, as well as potential decreases in costs to persons who prepare, distribute, or land-apply compost in Minnesota and Minnesota citizens in general.⁸⁹

75. In the SONAR, the Agency further noted that the proposed rule revisions include design and operational standards that more appropriately address the environmental risks of compost facilities that accept only SSOM, which will result in lower costs to design and operate a facility. In addition, the MPCA emphasized that, under the proposed rules, facilities would only be required to submit permit applications for the initial permit and major modifications throughout the life of the SSOM compost facility. If no changes are proposed to the facility at the time of permit reissuance, the proposed rules would require that only a notification form be submitted. As a result, the MPCA anticipates that MPCA staff resources devoted to permit reissuance will be decreased if the proposed rules are adopted. The Agency further expects that the facility would not need a consultant to prepare the application documents every five years, resulting in further cost savings to the facility and potential cost reductions to generators and citizens using compost sites.⁹⁰

Section 14.131(6)

76. The sixth factor requires a description of “the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals.”

⁸⁷ *Id.* at 47, 51-53.

⁸⁸ *Id.* at 51.

⁸⁹ *Id.* at 52-53.

⁹⁰ *Id.* at 52-53.

77. In the SONAR, the MPCA indicated that the MMSW design and operation requirements in the existing rules have made the possibility of composting SSOM in a densely populated area (where most SSOM is generated) challenging. The MPCA contends that the proposed rule revisions will give owners and operators more flexibility in finding a suitable site and will allow the composting of SSOM to be accomplished closer to where it is generated. According to the Agency, this should “lower transportation costs; allow for an expansion of the industry; reduce traffic impacts; and support business, commerce and trade.”⁹¹

78. The MPCA noted that there are currently eleven permitted facilities that compost SSOM and/or MMSW waste. The existing rules require that the Agency issue a permit every five years to all permitted compost facilities. On average, the Agency currently issues five permits per year and expends more than \$19,000 for staff time associated with permitting. Under the streamlined notification process set forth in the proposed rules, only new facilities and those making major modifications will be required to submit a permit application. The MPCA anticipates that approximately two new permits and five permit extension notifications will need to be processed each year, and projects that the Agency would see savings of almost \$12,600 per year if the proposed rules are adopted. The Agency also expects that the proposed rules will provide benefits to composting businesses by reducing or eliminating regulatory barriers, administrative costs, and consulting or engineering costs associated with the permitting process.⁹²

79. Overall, the MPCA determined that the Agency and regulated parties would expend more money and resources during the permitting process if the proposed rule amendments are not made. In its view, everyone involved will experience actual savings in time and costs if the process is streamlined in the fashion set forth in the proposed rules. In addition, the Agency indicated that the more appropriate standards for SSOM facilities and small compost facilities in the proposed rules will result in cost savings and promote increased SSOM composting.⁹³

Section 14.131(7)

80. The seventh factor requires “an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference.”

81. In the SONAR, the Agency stated that federal rules do not address composting at SSOM compost facilities, but do govern storm water leaving SSOM compost sites. The MPCA is the implementing agency in Minnesota for storm water management rules. The Agency indicated in the SONAR that all compost facilities will

⁹¹ *Id.* at 56.

⁹² *Id.* at 55-56.

⁹³ *Id.* at 53.

be required to meet those standards under the proposed rule revisions just as they have under the current rules.⁹⁴

Section 14.131(8)

82. The eighth and final factor requires "an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule." The reference to "cumulative effect" is defined to mean "the impact that results from incremental impact of the proposed rule in addition to other rules, regardless of what state or federal agency has adopted the other rules."⁹⁵

83. In the SONAR, the Agency noted that the purpose of the proposed rules is to establish an extended permit process and to add a new category for SSOM compost facilities. The Agency reiterated that there are no federal requirements or standards for SSOM compost facilities. It pointed out that, under Minnesota law, SSOM composting is a preferred waste management activity,⁹⁶ and asserted that the proposed rules support and implement the statutory preference for SSOM composting by encouraging such composting in backyards, community gardens, and urban farms. In its view, the proposed rules do not create cumulative impacts. The Agency indicated that its informal policy for food waste diversion from land disposal was reinforced in 2008 by the Minnesota Climate Change Advisory Group's adoption of a policy recommending that the food waste hierarchy be incorporated into overall waste management practices in Minnesota.⁹⁷

84. The SONAR also indicated that, in order to promote composting and identify barriers that needed to be removed, two groups of stakeholders who are involved in the management of organic materials were formed: the Food Waste Diversion Team and the Integrated Solid Waste Management Stakeholder Process. These efforts resulted in the development of the proposed rules. Accordingly, the Agency maintained that the proposed rules complement existing state policies.⁹⁸

85. Two members of the public (Daniel Halbach⁹⁹ and Thomas Halbach¹⁰⁰) objected to the proposed rules on the grounds that the Agency did not "identify and consider a reasonable number of alternatives, and from those alternatives select the least costly, most cost effective and least burdensome alternative that achieves the objectives of the rule," as required by applicable law. The Agency responded that it provided in the SONAR "a reasonable assessment of expected regulatory effects and costs associated with the proposed rules." It indicated that the primary goal of the proposed rules is to streamline the regulatory process and asserted that the creation of the small compost site category, the extended permit process, and site design

⁹⁴ *Id.* at 53.

⁹⁵ Minn. Stat. § 14.131(8).

⁹⁶ Minn. Stat. § 115A.02(b).

⁹⁷ *Id.* at 53-54.

⁹⁸ *Id.* at 54.

⁹⁹ Public Comment 46.

¹⁰⁰ Public Comment 80.

requirements customized to SSOM facilities were consistent with that goal. The Agency acknowledged that actual costs and economic effects of the proposed rules are variable and depend on the size and location of the facility. It maintains that it undertook a reasonable effort to ascertain the probable costs of complying with the proposed rules for regulated parties, the agency, local governments, and others affected by the rules and met the requirements of Minn. Stat. § 14.131.¹⁰¹

86. The Administrative Law Judge finds that the Agency has adequately considered the potential alternatives and probable costs associated with the proposed rules and has otherwise complied with the eight-factor analysis required by Minn. Stat. § 14.131.

Performance-Based Regulation

87. The Administrative Procedure Act also requires that an agency describe in its SONAR how it has considered and implemented the legislative policy supporting performance-based regulatory systems set forth in Minn. Stat. § 14.002.¹⁰² A performance-based rule is one that emphasizes superior achievement in meeting the agency's regulatory objectives and maximum flexibility for the regulated party and the agency in meeting those goals.¹⁰³

88. In its SONAR, the Agency asserted that, as a result of extensive consultation with the regulated industry, the rule as proposed is largely performance-based. The MPCA pointed out that, in most instances, the technical standards in the proposed rules require the owner or operator to design the SSOM facility based on a consideration of the types of soils that are present, and establish a five-foot separation distance to the water table. In addition, the Agency maintained that the option of operating under an extended permit if certain criteria are met will "offer permitted facilities and the Agency the opportunity to decrease permit consultation fees and Agency staff administration costs, where applicable, while protecting human health and the environment."¹⁰⁴

89. In several areas, the proposed rules reflect flexibility for the regulated parties rather than prescribing a specific approach that must be followed. For example, the Commissioner is authorized under the proposed rules to approve: (1) alternate separation distances from nearby property owners; (2) alternate methods for soil profiles; (3) alternate separation distances from the water table; (4) the use of alternate liners; (4) expansion of the types of organic materials allowed at a site; and (5) exceptions to contact water requirements for residuals.¹⁰⁵ The Administrative Law Judge finds that the Agency has met the requirements set forth in section 14.131 for

¹⁰¹ MPCA's Initial Response at 38, *citing* SONAR at 43-54.

¹⁰² Minn. Stat. § 14.131.

¹⁰³ Minn. Stat. § 14.002.

¹⁰⁴ SONAR at 54.

¹⁰⁵ Transcript of March 24, 2014, Rule Hearing (Tr.) at 48, 50 (Morning Session); *see also* Proposed Rules Parts 7035.0300, subp. 105a(B), 7035.2836, subps.8(D)(1), 9(B)((8)(a) and (b), 9(B)(9), and 11(B)(4).

consideration and implementation of the legislative policy supporting performance-based regulatory systems.

Consultation with the Commissioner of Management and Budget

90. Under Minn. Stat. § 14.131, the Agency is required to “consult with the commissioner of management and budget to help evaluate the fiscal impact and fiscal benefits of the proposed rule on units of local government.”

91. On November 8, 2013, the Agency sent a letter to the Commissioner of Minnesota Management & Budget enclosing copies of the proposed rule and the SONAR, and requested an evaluation of the fiscal impact and benefits of the proposed rules on local units of government, as required by Minn. Stat. § 14.131.¹⁰⁶

92. In a memorandum dated November 21, 2013, Michelle Mitchell, Executive Budget Officer for Minnesota Management & Budget, noted that she had reviewed the Agency’s proposed rule amendments and SONAR and had consulted with agency staff to determine the fiscal impact of the proposed rules with respect to local governments. Ms. Mitchell noted that the proposed rules were consistent with the view of stakeholders that source-separated organic materials do not pose the same kinds of health and environmental risks as mixed municipal solid waste and should be regulated under rules that reflect this difference. She concluded that the proposed rules will likely result in reduced costs for composting facilities and found that the MPCA “has adequately analyzed and presented the potential financial impact of the proposed rule changes.”¹⁰⁷

93. The Administrative Law Judge finds that the Agency has met the requirements set forth in Minn. Stat. § 14.131.

Compliance Costs for Small Businesses and Cities

94. Under Minn. Stat. § 14.127, the Agency must “determine if the cost of complying with a proposed rule in the first year after the rule takes effect will exceed \$25,000 for: (1) any one business that has less than 50 full-time employees; or (2) any one statutory or home rule charter city that has less than ten full-time employees.” The Agency must make this determination before the close of the hearing record, and the Administrative Law Judge must review the determination and approve or disapprove it.

95. In the SONAR, the Agency stated that it does not expect costs under the proposed rules to exceed the \$25,000 threshold. Because there is no requirement that SSOM be recycled, the MPCA emphasized that any cost to a business of any size or a statutory or home rule charter city would be caused by discretionary action on their part. The Agency also stated that it anticipates that the proposed rules would reduce costs to businesses by (1) eliminating the costs of permitting some classes of small compost facilities; (2) significantly reducing the permitting and construction costs of SSOM compost facilities that are able to avoid having to construct a concrete pad; and

¹⁰⁶ Ex. 8a at ¶ 5; Ex. 8m.

¹⁰⁷ Ex. 8m.

(3) removing the testing requirements for mercury and polychlorinated biphenyls (PCBs) under certain circumstances. While the Agency acknowledged that some costs will increase under the proposed rules due to the training requirements, the Agency expects that the overall effect will be that the reductions and increases in costs will offset each other and have minimal impact when considering overall cost savings.¹⁰⁸

96. The Administrative Law Judge finds that the Agency has made the determination required by Minn. Stat. § 14.127 and approves that determination.

Adoption or Amendment of Local Ordinances

97. Under Minn. Stat. § 14.128, the agency must determine if a local government will be required to adopt or amend an ordinance or other regulation to comply with a proposed agency rule. The agency must make this determination before the close of the hearing record, and the Administrative Law Judge must review the determination and approve or disapprove it.¹⁰⁹

98. The Agency determined that no local government will be required to adopt or amend an ordinance or other regulation to comply with the proposed rules. The Agency noted that local governments who own or operate a compost facility will need to comply with the requirements in Minnesota Rules Chapter 7035, just as in the past.¹¹⁰

99. The Administrative Law Judge finds that the Agency has made the determination required by Minn. Stat. § 14.128 and approves that determination.

Analysis of the Proposed Rules

100. The Agency generally contends that there is a need to amend the existing rules to ensure that the standards are more appropriately related to the type of materials that are being composted (i.e., SSOM and not MMSW). It asserted that it has received requests from both industry and the public sector to change the compost rule due to the high cost associated with constructing solid waste compost facilities. These individuals and organizations have alleged that the high costs have prevented composting facilities from being competitive with the land disposal industry and have suppressed the growth of the composting industry. The MPCA maintains that there is also a need to update the requirements set forth in the existing rules so that they reflect current practices. Stakeholders have requested that the extended permit concept (currently used for solid waste transfer facilities) be incorporated for SSOM facilities to allow them more flexibility while still protecting human health and the environment. The Agency asserts that there is a need to modify the rule requirements to allow both regulated parties and the MPCA to spend fewer resources submitting and processing permit applications if no major changes are occurring at the site.¹¹¹

¹⁰⁸ SONAR at 57-58.

¹⁰⁹ Minn. Stat. § 14.128, subd. 1.

¹¹⁰ SONAR at 57.

¹¹¹ SONAR at 7.

101. The MPCA further contends that the proposed rules are reasonable as a whole. According to the Agency, the composting industry (including local government unit compost facility operators and others) have expressed a belief that the current composting rules are overly restrictive for the composting of SSOM and have urged that the requirements in the current rules be streamlined in order to reduce costs and increase composting. The Agency indicated that it agrees that some regulatory relief is appropriate and, as a result, has proposed amendments regarding the design, location, construction and operation requirements for SSOM compost facilities. In addition, the Agency believes that the rules provide further flexibility through the "small compost site" category and the extended permit process.¹¹²

102. This Report is limited to discussion of the portions of the proposed rules that received critical comment or otherwise need to be examined; it will not discuss each comment or rule part. Persons or groups who do not find their particular comments referenced in this Report should know that all comments, including those made prior to the hearing, have been carefully read and considered.

103. The Administrative Law Judge finds that the Agency has demonstrated, by an affirmative presentation of facts, the need for and reasonableness of all rule provisions not specifically discussed in this Report. The Administrative Law Judge also finds that all provisions not specifically discussed are authorized by statute and there are no other problems that would prevent the adoption of the rules.

Overview of General Comments Regarding the Proposed Rules

I. Relationship between the Proposed Rules and MPCA-Funded Projects with Carver County

104. The MPCA has funded three separate projects with Carver County addressing the composting of organic materials. The 2008 project addressed commingling residential organics with yard waste. The 2010 project continued and expanded the commercial and residential co-collected organics composting project. The 2014 project involves scientific evaluation of contact and storm water from the Organics Demonstration Site. The 2014 project consists of two phases. Phase 1 was completed during 2012 and involved the collection of infiltrating contact water through suction lysimeters and sheet flow collection. Phase 2 began in 2013 and is ongoing at the present time. It involves the use of a collection lysimeter (liner system) so that the total volume of water in the system can be evaluated. Phase 2 is expected to be completed and the final report relating to the 2014 project is expected to be issued by June 30, 2014.¹¹³ The final design and implementation of these projects was agreed to by all of the Project Team members, which included the MPCA, Carver County staff, University of Minnesota Extension staff, and the compost site operator.¹¹⁴

¹¹² *Id.*

¹¹³ MPCA's Initial Post-Hearing Response (April 14, 2014) (MPCA's Initial Response) at 3 and 42.

¹¹⁴ MPCA's Rebuttal Post-Hearing Response (April 21, 2014) (MPCA's Rebuttal Response) at 9.

105. Several general comments made with respect to the timing of the proposed rules and the Agency's treatment and use of preliminary data from the 2014 Project are discussed below.

A. Issuance of Proposed Rules prior to Completion of 2014 Project

106. A number of individuals and organizations, including Ramsey County Commissioner Victoria Reinhardt on behalf of the Solid Waste Management Coordinating Board;¹¹⁵ Ginny Black of the Minnesota Composting Council;¹¹⁶ Jim Aitkin, a hydrogeologist representing the National Waste & Recycling Association;¹¹⁷ Dan Heitzman of VONCO Waste Management;¹¹⁸ John Jaimez¹¹⁹ and Ali Durgunoglu¹²⁰ of Hennepin County; and Sarah Braman,¹²¹ Marcus Zbinden,¹²² Bill Fouks,¹²³ and Mike Lein¹²⁴ of Carver County, made comments about the timing of the proposed rules vis-à-vis the completion of the 2014 project funded by the MPCA in Carver County. Several of them contended that the information from all three projects was intended to be used to assist in the MPCA in the rule revision process, and stated that the MPCA should not have proposed the rules until the 2014 Carver County study was completed.¹²⁵

107. In its initial post-hearing response, the MPCA stated that it was proposing the rules "with knowledge of the data and analysis from the 2008 and 2010 Carver County projects, as well as data from the 2014 project."¹²⁶ The Agency indicated that it did not delay the proposed rules to await final analysis of the 2014 project because, in its view, there are "significant limitations with respect to both phases [of the 2014 project] that limit the applicability of the data."¹²⁷

108. The MPCA identified the following limitations of both phases of the 2014 Carver County project in its post-hearing response:

- The rain simulator used to ensure rainfall limited the height of the test piles to approximately 4 feet rather than the 12 feet allowed under the proposed rule;
- The simulated rain was inconsistently applied across the entire pile resulting in the center of the pile becoming saturated while the edges were hardly wetted;

¹¹⁵ Tr. 67-80 (Morning Session); Public Ex. 87; Public Comments 77 and 109.

¹¹⁶ Tr. 110-137 (Morning Session); Public Exs. 91 and 92; Public Comments 5 and 104.

¹¹⁷ Tr. 164-91 (Morning Session); Public Exs. 93 and 94; Public Comments 67 and 105.

¹¹⁸ Tr. 43-44 (Evening Session); Public Ex. 95; Public Comment 106.

¹¹⁹ Tr. 146-53, 201-02 (Morning Session); Public Comment 110.

¹²⁰ Tr. 153-64 (Morning Session).

¹²¹ Tr. 96-105, 185-191, and 196-201 (Morning Session); Public Comment 58; Public Exs. 89, 90.

¹²² Tr. 81-96 (Morning Session); Public Ex. 88; Public Comments 101 and 107.

¹²³ Public Comment 26.

¹²⁴ Public Comment 72.

¹²⁵ See, e.g., Public Comment 72.

¹²⁶ MPCA's Initial Response at 4.

¹²⁷ *Id.*

- The quantity of simulated rain intended to be applied to the pile over a 24-hour period was applied over 3½ hours; and
- The contact water data set consists of very few data points.¹²⁸

109. According to the Agency, the following additional limitations related to the phase 1 suction lysimeter tests:

- Sufficient sample volumes were difficult to obtain due to sampler limitations;
- Total volume of contact water generated cannot be determined;
- Samplers may add or subtract chemical constituents by leaching or absorption;
- The time necessary to extract a sample may exceed sample holding times for accurate analysis; and
- Chemical equilibria and standards were not established when using ceramic cup suction lysimeters.¹²⁹

110. The MPCA also identified the following additional limitations relating to the phase 2 collection lysimeter (liner system) tests:

- The piles were turned once rather than the three to five times required under the proposed rules;
- The test pad aggregate was different from that which would be required under the proposed rule;
- The test pad aggregate was compacted with a vibrating plate tamper rather than compacted by heavy equipment as would typically be used in constructing a large aggregate pad;
- Heavy equipment was not driven on the test pads as is typical at an operating site; and
- The compost piles were mixed from a single truckload of commercial and residential organics.¹³⁰

111. Based on these limitations, the Agency determined that “the perceived value of completing the proposed rule exceeded the perceived value of waiting for the

¹²⁸ *Id.*

¹²⁹ *Id.* at 4-5.

¹³⁰ *Id.* at 5.

finalized data."¹³¹ The Agency emphasized that "[f]urther delays [in adopting the rules] ensure that more organic material is managed via landfilling or incineration, which are less preferred alternatives to composting as established in the hierarchy under the Minnesota Waste Management Act."¹³²

112. It is apparent that reasonable minds are divided about whether or not it was reasonable and proper for the Agency to proceed with rulemaking without awaiting the final Carver County project report. It is also evident that different individuals and groups have differing opinions about the value and limitations of that study and different philosophies about whether rulemaking should await further data collection. However, as noted above, an agency is legally entitled to make choices between possible approaches so long as its choice is rational. It is not the role of the Administrative Law Judge to determine which policy alternative presents the "best" approach, since this would invade the policy-making discretion of the agency. The question is, rather, whether the choice made by the agency is one that a rational person could have made.¹³³

113. The Administrative Law Judge finds that the MPCA has presented a logical rationale for its decision to move forward with the rules at this time, and has identified certain limitations in the 2014 Project that, in its view, limit the applicability of the data obtained. The Agency's decision not to further delay rulemaking is consistent with the statutory policy favoring the composting of SSOM over MMSW composting or incineration. Under the circumstances, the Administrative Law Judge finds that the Agency's proposed rules are not defective due to the timing of their proposal.

B. MPCA's Treatment and Use of Preliminary Data from the 2014 Project

114. Despite the fact that the Agency did not wait for the final report of the 2014 Project before commencing this rulemaking proceeding, it did acknowledge that it considered the preliminary data (along with other information) in formulating these proposed rules. As discussed in more detail in the rule-by-rule analysis below, the MPCA also admitted that it elected to take an approach that was more protective of the environment after reviewing some of the preliminary data from the 2014 Project.

115. Some of those commenting on the proposed rules stated that the MPCA ignored certain data from the ongoing 2014 project with Carver County or should have assigned more weight to certain components of that project. For example, the Minnesota Chapter of the National Waste & Recycling Association expressed concern regarding the location and design standards contained in the proposed rule because they are being proposed without consideration of the final report from the 2014 project.¹³⁴

¹³¹ *Id.*

¹³² *Id.*, citing Minn. Stat. § 115A.02(b).

¹³³ *Federal Sec. Adm'r v. Quaker Oats Co.*, 318 U.S. 218, 233 (1943).

¹³⁴ Public Comment 67.

116. Carver County and other commenters stated that the 2014 project does not fairly represent typical composting operations and indicated that the proposed rule should only be based on data from the 2008 and 2010 projects. Dale Denn, a septic system designer and installer of residential and commercial septic systems, indicated that he was hired by Carver County in July 2013 to perform the excavating and material construction of the test sites. Mr. Denn commented that, in his professional opinion, the test cells used in the 2014 project “do not accurately represent or replicate a typical compost pad.” He indicated that the test plots “would have much faster infiltration rates and lower runoff potential than real life compost pads,” primarily because he does not recall the gravel in the test sites being compacted to MnDOT specifications. He also noted a number of other material differences between the test sites and a typical compost site.¹³⁵

117. Carver County noted that Braun Intertec, which was hired to evaluate the permeability of the test cells and the working pad located at the demonstration site, determined that the test cells were 25 times more permeable than the actual demonstration site work pad and is not representative of a working compost site.¹³⁶ Carver County also provided a list of limitations associated with the liner method used in the study. Among other things, the County maintained that the liner method “collected invalid biological data that cannot be used” because the test cells and collection containers could not be sanitized in between simulations, which allowed colony-forming bacteria to “thrive, grow, and contaminate the next simulation results.” In addition, the County alleged that, because samples were collected the day after the simulation, bacteria were allowed to “multiply in the nutrient rich environment for up to 20 hours.” The County contended that “these two factors deviate widely from standard practices, invalidating the findings.” In addition, the County asserted that the data collected by the liner method is significantly insignificant because the liner method “did not compare a diverse mix of feed stocks and represents a single data set from which scientific, statistical conclusions cannot be drawn.”¹³⁷

118. Because the liner method used in the second phase of the 2014 Project was flawed, Carver County contends that it “caused elevated levels of total coliform and E. coli. and was not useful for measuring bacterial loading of compost piles following normal compost cycle.” The County asserted that it was unfortunate that the MPCA considered the erroneous biological data when drafting the more restrictive siting rules but did not wait for the analysis of the test methods to be completed.¹³⁸ Several other individuals and organizations commenting on the proposed rules, including the Minnesota Composting Council and the Solid Waste Management Coordinating Board, also expressed criticism of the MPCA’s reliance on data from the flawed study to make significant and serious changes to the proposed rules.¹³⁹

¹³⁵ Public Comment 108.

¹³⁶ Public Comment 107 and attached Ex. E.

¹³⁷ Public Comment 107.

¹³⁸ *Id.*

¹³⁹ Public Comments 104, 107, 109, 111.

119. In its testimony at the hearing and its written post-hearing submissions, Carver County also asserted that the MPCA posted biased and incomplete data from the 2014 Carver County project on its website during late February of 2014. It alleged that the data published by the MPCA was biased towards showing contamination, and asserted that the publication occurred over the objections of the project team members who were contractually assigned to collect, evaluate and disseminate the data. This team included Marcus Zbinden (Project Manager) and Sarah Braman from Carver County; Tom Halbach (Technical Advisor) and Carl Rosen from the University of Minnesota; Anne Ludvik and Rob Friends from Specialized Environmental Technologies, and Mark Zumwinkle from the Minnesota Department of Agriculture. Carver County alleged that the project team “strongly objected to the release of the raw project data outside the framework of the Final Grant Report to the MPCA” and “felt it was counterproductive to release data” outside the final report because the project team “would not be in a position to answer questions or interpret the findings.” He contended that, despite the project team’s objections, the MPCA published data that was “incomplete, inaccurate and out of context” and failed to make corrections requested by the project team. The County also alleged that the posting of the summary and data was not prompted by the filing of a Minnesota Government Data Practices Act request, as the Agency originally claimed.¹⁴⁰

120. In its post-hearing submissions, the MPCA asserted that it had received several informal requests for the data collected from the compost study at Carver County in January 2014, after the release of the proposed rules. The Agency noted that the majority of the data and information submitted to the MPCA is public and is shared regularly with interested parties, and indicated that it responds to informal requests for information if feasible rather than requiring submission of a formal request under the Minnesota Government Data Practices Act. The Agency indicated that it prepared a short document summarizing the project design, construction, and implementation in order to provide context to the data it was releasing; it denied any intent to undermine the Carver County study. The MPCA acknowledged that the summary did not address all details of the project and contended that it did not formulate conclusions or opinions. A large amount of the data collected during the 2012 and 2013 project was included in the appendices of the summary. According to the MPCA, the data tables provide a summary of the data collected, and do not represent every data point that was collected. The Agency removed “[r]ows and columns that had no data points, such as rows of analysts that were not detected at any time during the project and columns where insufficient quantities of water were collected to sample.” The MPCA stated that it shared the draft summary document with Carver County staff and project team members on January 16, 2014, and asked for input. Their comments were received on February 11, 2014, and the Agency incorporated the comments “as appropriate” prior to publishing the summary document on the MPCA website on March 12, 2014. By that time, two formal requests under the Data Practices Act had been received. The MPCA indicated that it included qualifications in the document, including Carver County’s

¹⁴⁰ Tr. 96-105 (Morning Session); Public Ex. 89-90; Public Comments 58, 72, 107.

objection to publishing the document, and made it clear that a final report is expected at a later date.¹⁴¹

121. The Agency also indicated in its post-hearing submissions that it had considered information and data from all three Carver County projects in the development of the proposed rules. It asserted that it has also taken a great deal of other information into account, including the studies referenced in Agency Exhibit 15; information submitted during the informal stakeholder comment periods; contact water data submitted to the Agency from composting facilities; regulations pertaining to compost facilities that have been adopted by other states; and the professional expertise and experience of the Agency's policy and technical staff. Although the Agency acknowledged that the studies it reviewed had their own challenges and limitations, it contended that each study had further informed the Agency's understanding of the potential environmental benefits and risks of composting. The Agency asserted that it "assessed each source of information, and through careful deliberations, used those sources collectively to develop the proposed rule."¹⁴² The Agency further contended that the provisions relating to contact water management are reasonable and necessary because of the possibility that contact water may contain constituents of concern. It maintains that the requirement in part 7035.2836, subpart 9, item B, subitem 4, that contact water be collected and managed through a treatment system, along with the requirements of subparts 8 through 11 of that rule, "ensure that all permitted compost facilities in Minnesota are adequately protective of groundwater and surface waters."¹⁴³

122. While it is apparent that other members of the project team have professional and sincerely-held disagreements with the content of the summary and the preliminary data prepared by the MPCA and the manner in which the preliminary data was presented, it is not the role of the Administrative Law Judge in this proceeding to make a determination as to the accuracy or completeness of the summary or data tables. Reasonable minds can differ concerning the strengths and weaknesses of scientific methods and the proper weight and effect that should be given to various study results. As a general matter, the Administrative Law Judge further finds that the proposed rules are not rendered defective because the Agency may have afforded certain data from the 2014 Project greater weight than other data. The rule-by-rule analysis below will consider more specifically whether the required showing of need and reasonableness has been made for particular rule provisions.

¹⁴¹ MPCA's Initial Response at 40 and attached summary document and appendices; MPCA's Rebuttal Response at 7-8.

¹⁴² MPCA's Initial Response at 6; see *also* Agency Ex. 16.

¹⁴³ MPCA's Initial Response at 7.

II. Broad Challenges to the MPCA's Regulatory Process and Approach

123. Several individuals and groups, including Daniel Halbach,¹⁴⁴ Thomas Halbach,¹⁴⁵ the Minnesota Composting Council,¹⁴⁶ the Solid Waste Management Coordinating Board,¹⁴⁷ Hennepin County,¹⁴⁸ and Carver County,¹⁴⁹ argued that the rules are too restrictive and questioned whether there is an adequate scientific basis for treating SSOM in the manner set forth in the proposed rules. Some of them challenged the assertion in the SONAR that "SSOM presents a greater risk to health and the environment than composting of yard waste and less risk than composting of MMSW,"¹⁵⁰ and contended that this statement is unsupported by objective evidence. Carver County contended that the research projects funded by the MPCA do not support this statement, and asserted that the MPCA's assumption reflects a lack of understanding on the part of the Agency of the facts surrounding organics composting. Due to the alleged lack of scientific information demonstrating the increased risk of SSOM to human health and the environment, Daniel Halbach, Tom Halbach, and others commenting on the proposed rules maintained it would be more appropriate for the MPCA to regulate SSOM facilities in the same manner as yard waste compost facilities.

124. The Solid Waste Management Coordinating Board expressed several concerns about the proposed rules. It maintained that the proposed rules improperly regulate source-separated organic material in the same way as landfills. The Board further argued that the MPCA has not properly taken into account the Metropolitan Solid Waste Policy Plan for 2010 through 2013, which sets targets for fifteen percent organics recovery by 2030, and emphasized the need to lower the financial barriers for developing SSOM composting sites in order to work toward the ambitious organics recovery goals in the Policy Plan. The Board urged the MPCA to further reduce the burden created by certain sections of the proposed rules by matching the protective measures with the actual risks posed. It was critical of the MPCA for failing to follow the Model Compost Rule Template that was adopted in April 2013 by "over 800 private and municipal compost producers, academic institutions, and public agencies" who are members of the US Composting Council."¹⁵¹ The Minnesota Composting Council, Carver County, Dale Denn, and the Solid Waste Management Coordinating Board also compared the requirements in the proposed rules for water collection and treatment systems to individual sewage treatment systems and storm water collection ponds.¹⁵²

125. The MPCA responded that the requirements for SSOM compost facilities are not the same as the requirements for landfills. It pointed out that the proposed rules would streamline the permitting process and lower financial barriers to the development of SSOM facilities by creating a new SSOM category rather than continuing the current

¹⁴⁴ Public Comment 46.

¹⁴⁵ Public Comment 80.

¹⁴⁶ Public Comment 104.

¹⁴⁷ Tr. at 67-80 (Morning Session); Public Ex. 87; Public Comments 77 and 109.

¹⁴⁸ Tr. 146-164, 191-96, 201 (Morning Session); Public Comment 110.

¹⁴⁹ Public Comment 72.

¹⁵⁰ SONAR at 24.

¹⁵¹ Tr. at 67-80 (Morning Session); Public Ex. 87; Public Comments 77 and 109.

¹⁵² Public Comments 104, 107, 108, and 109.

approach under which SSOM facilities are required to be permitted under the more stringent and costly MMSW permitting process. The MPCA maintained that the draft rule takes into account the goals and policies of the Metropolitan Solid Waste Management Policy Plan by "[m]anaging waste in a manner that will protect the environment and public health, reduce greenhouse gas emissions, and conserve energy and resources."¹⁵³ With respect to the suggestion of the Solid Waste Management Coordinating Board that the MPCA support local efforts to offer curbside organics recycling by reallocating the Solid Waste Management Tax, the Agency indicated that it would need legislative approval to reallocate those funds.¹⁵⁴

126. The MPCA did not agree with the assertions by Carver County, the Minnesota Composting Council, Professor Halbach, and others that the research projects at Carver County provide adequate data on which to base a determination that SSOM should be regulated at the same level as yard waste. The Agency pointed out that yard waste compost sites have little oversight and few state regulations. It believes the draft rule as proposed provides the necessary regulation to protect human health and the environment.¹⁵⁵ In response to comments suggesting that the proposed rules' requirements for water collection and treatment systems should be more like individual sewage treatment systems and storm water collection ponds, the MPCA stated that water collection and treatment systems in the proposed SSOM compost facility rules are very different from septic systems and storm water collection ponds. For example, the MPCA indicated that storm water collection ponds are one part of a larger engineered system to treat storm water runoff (not leachate or compost contact water), and septic systems are multistage treatment systems engineered to manage a small volume of biological contaminants. It noted that the water volume and levels and types of contaminants vary dramatically with respect to each of these systems, and asserted that direct comparison of these systems is not valid.¹⁵⁶

127. In contrast, others filing comments on the proposed rules objected to the rules on the grounds that they were too permissive. For example, VONCO Waste Management argued that the MPCA has improperly relaxed its "long-standing environmentally protective composting rules" based upon its false assumption that "runoff" or "contact water" at SSOM sites is less toxic than "leachate" at MMSW sites. After reviewing internal e-mail and other MPCA documents obtained as part of a data practices request, VONCO asserted that the MPCA rejected the recommendations of its technical staff to require construction of an impervious compost pad and attempted to hide data from the 2014 Carver County Project by deciding not to provide "an entire data dump" last winter in response to public inquiry. VONCO maintained that MPCA minutes and other documents support a conclusion that the Agency should "kill the highly-inconvenient MPCA-designed Carver County waste study" by holding that project for a year "until we have the compost rules in our rear view mirror." VONCO contended that the MPCA based the proposed rules on "false assumptions that (1) SSOM leachate will prove to be benign and (2) a low-cost compacted gravel pad will protect

¹⁵³ MPCA's Initial Response at 36-37.

¹⁵⁴ *Id.* at 37.

¹⁵⁵ *Id.* at 35.

¹⁵⁶ MPCA's Rebuttal Response at 6.

groundwater from contamination by SSOM leachate.” As a result, VONCO argued that the MPCA has failed to show the need and reasonableness of the proposed rules.¹⁵⁷

128. The National Waste & Recycling Association also objected to the proposed rules and urged that the Agency require more protective measures. Based upon a hydrological study prepared by Jim Aiken of Barr Engineering using “complete data” from the 2014 Carver County Project, the Association argued that “leachate” from SSOM “is as, or more dangerous, to water resources” as MMSW leachate from landfills. It contended that the data collected from the 2014 Project “clearly shows that SSOM leachate is not benign, as initially assumed by MPCA staff at the onset of this rulemaking endeavor, and that more protective measures are required than what is being proposed” The Association maintained that the proposed rules are not based on scientific evidence but instead on an assumption that the compost material will not harm water resources at these facilities. It also contended that internal Agency e-mails show that the MPCA ignored the unanimous view of its technical staff that an impervious surface should be required for SSOM facilities.¹⁵⁸ The Minnesota Composting Council, Carver County, Hennepin County, Thomas Halbach, Robert Kaiser of American Engineering Testing, Inc., and others were critical of the hypothetical hydrological analysis offered by the National Waste & Recycling Association.¹⁵⁹

129. The MPCA argued that there are a number of inaccuracies in VONCO’s comment. It asserted that Public Hearing Ex. 95, on which VONCO relied, intermingles documents relating to two separate projects: (1) the 2014 Carver County project; and (2) a separate project concept that was considered for a future research proposal to the Legislative Citizens Commission on Minnesota Resources (LCCMR). It indicated that the LCCMR proposal concept was never submitted to the LCCMR. The MPCA contends that VONCO confused documents relating to these two projects and improperly relied on documents pertaining to the LCCMR proposal concept as a basis for its assertion that the Agency hid information pertaining to the 2014 Carver County project or placed that project on hold.¹⁶⁰

130. The MPCA also disagreed with VONCO’s allegation that the draft summary document relating to the Carver County project that was published on the MPCA’s website provided further evidence that the Agency was hiding information. The MPCA contended that the opposite was true: it posted the draft summary document because it was trying “to maintain transparency by sharing information with all stakeholders.” It noted that publication of the draft document was prompted by the fact that preliminary data from the 2014 Carver County project was being discussed in public presentations and two informal data requests had been received. The Agency denied that it developed the proposed rules without accounting for information received from the Carver County project. The MPCA asserted that, in fact, it relied upon preliminary

¹⁵⁷ Public Ex. 95; Public Comment 106.

¹⁵⁸ Public Comment 105.

¹⁵⁹ See, e.g., Tr. 105-10 and 185-206 (Morning Session); Public Comment 104 and attached analysis by American Engineering Testing, Inc.; Public Comment 107; Public Comment 111.

¹⁶⁰ MPCA’s Rebuttal Response at 11.

data from that project which suggested “a previously unrecognized potential for water quality impacts” when it decided to reduce the allowable soil types from nine to six in the final proposed rule. The Agency noted, however, that the proposed rules were not based solely on the Carver County data.¹⁶¹

131. In further response to VONCO’s comments, the MPCA denied that the proposed rules were developed based upon its assessment that contact water is “benign.” Instead, based on a review of the available information and studies, the Agency asserted that the “materials, siting, design and operating provisions of the proposed rule (of which contact water management is one provision), working in combination with each other, will ensure that SSOM compost facilities are adequately protective of human health and the environment.”¹⁶²

132. The MPCA further indicated that, while the hydrological analysis offered by the National Waste & Recycling Association was generally credible, it disagrees with the conclusions reached about the quality and quantity of infiltrating contact water. The Agency noted that the hydrological analysis was based on the ongoing 2014 Carver County project and indicated that its disagreement with the analysis is due to the limitations of that project, as discussed above in Findings 108-110. The Agency asserted that the “six eligible soil types in combination with a hard packed all-weather drivable surface and the operational requirements established in the proposed rule, are adequately protective of waters of the state.” It also pointed out that the proposed rules will allow facilities located in areas of the state that do not have the six approved soil types to use a pad system or an alternative liner system.¹⁶³

133. The Agency reiterated that it considered all available data and information in developing the rule, including the final results from the first two Carver County studies, the preliminary results from the third Carver County study, reports from other permitted facilities, and the studies identified in Agency Exhibit 15. It asserted that it invited and facilitated debate among stakeholders and considered information submitted by stakeholders as well as regulations developed in other states. It indicated that it also relied on the professional expertise and experience of its staff, contact water data submitted to the Agency by composting facilities, and regulations for compost facilities in other states. It contended that Agency staff met frequently to discuss rule development and the Carver County research, and engaged in “robust” and vigorous debate about the available information and how to balance the goals of promoting expanded SSOM composting while including appropriate protections of health and the environment. The MPCA further asserted that the Model Compost Rule Template published by the US Composting Council was primarily based on the first draft of the SSOM compost rule published by the MPCA, and contends that it made changes to the draft rule based on additional information collected by the Agency and comments and information submitted by stakeholders. It maintains that the proposed rules reflect the

¹⁶¹ *Id.*

¹⁶² *Id.* at 11-12.

¹⁶³ MPCA’s Initial Response at 7; see Proposed Rules, Parts 7035.2836, subp. 9(B)(9) and 9(B)(9)(c).

best collective judgment of the MPCA and impose appropriate and reasonable requirements and controls to protect human health and the environment.¹⁶⁴

134. The MPCA asserted that the proposed rules provide regulatory relief for SSOM facilities as compared to MMSW compost facilities in several ways. First, the proposed rules adjust the pad requirements to expand capacity at compost sites and lower capital investments needed to establish and operate a facility. The Agency noted that a pad is only required for the tipping area, mixing area, rejects, residuals and active composting areas. Because a pad is not required for the curing or finished compost storage areas, more activity will take place on surfaces that can be developed at a lower cost. Moreover, where there are appropriate soil types, a hard packed, all-weather surface can be used instead of concrete, asphalt, or geomembrane liners. Second, the MPCA asserted that the proposed rules allow greater flexibility for SSOM compost facilities where applicants can demonstrate that new technologies or operational practices are adequately protective of human health and the environment. For example, the proposed rules include allowances for alternate siting distances, alternate liner systems, alternate site characterization processes, and expanded types of acceptable materials. Finally, the Agency contended that the creation of a separate category for "small compost sites" reflects the streamlining of the regulatory requirements compared to the approach in the existing rules.¹⁶⁵

135. The Administrative Law Judge concludes that the Agency has provided a rational explanation of the general approach it is taking in the proposed rules and the grounds on which it is relying. It is, once again, apparent that others disagree with that approach by finding it either too restrictive or too permissive. However, an agency is allowed to make rational choices between possible approaches and the Administrative Law Judge cannot properly interfere with its policy-making discretion. The Administrative Law Judge finds that the general approach taken in the proposed rules does not cause the rules to be defective. The rule-by-rule analysis below will consider more specifically whether the required showing of need and reasonableness has been made for particular rule provisions.

III. Other General Comments regarding the Proposed Rules

136. The Minnesota Composting Council, the City of Minneapolis, Carver County, Eureka Recycling, and Winona County suggested that the Agency consider adopting a tiered approach to regulating compost facilities.¹⁶⁶ They noted that New York is considering raising SSOM volumes from 1,000 to 5,000 cubic yards, and urged the MPCA to follow Wisconsin's lead and allow for intermediate-sized SSOM facilities to accept up to 5,000 cubic yards of SSOM at any one time, subject to performance standards. Several recommended that a regulation and permitting system should be developed that increases regulatory controls as the types or tonnages of organic

¹⁶⁴ Tr. at 75-76 (Morning Session); Agency Ex. 15; MPCA's Initial Response at 38, 39, 44; MPCA's Rebuttal Response at 2-3; see also MPCA staff discussions reflected in attachments to Public Comment 15.

¹⁶⁵ MPCA's Initial Response at 36-37.

¹⁶⁶ Public Comments 5, 71, 72, 75, and 76.

materials increase, with the following levels recognized: (1) backyard composting (no MPCA permit or training required); (2) yard waste (permit by rule); (3) small site (recommended increase to 100 cubic yards annually or equivalent weight); (4) residential source separated (up to 5,000 cubic yards – prescriptive rules); (5) large scale commercial source-separated (other material as approved by MPCA); and (6) solid waste.

137. In its initial post-hearing response, the MPCA indicated that it had looked at other states' rules during its initial drafting of the SSOM rule, including those of Wisconsin and New York, and determined that the tiered-system approach would not work in Minnesota because it currently has rules relating to yard waste and MMSW composting. The Agency indicated that "[t]he reason for the SSOM rule is to come up with a rule in between the two existing ones." According to the Agency, the Small Composting Site and SSOM classification in the proposed rules will work as well as the recommended tiered approach.¹⁶⁷

138. Curtis Speck,¹⁶⁸ Sandra Speck,¹⁶⁹ and others commented that the MPCA and owners of composting sites need to ensure that neighboring property owners are afforded sufficient time to ask questions and voice their opinions before a proposed site is approved. They raised concerns regarding the effect of compost sites on neighbors' property values, the limited amount of time that neighbors have to organize and respond when a new site is proposed, and the perception that decisions are made before notice is issued.

139. In response, the MPCA emphasized that, prior to issuance of all solid waste permits, the Agency must prepare and issue a public notice of the completed application and the Commissioner's preliminary determination regarding whether the permit should be issued or denied.¹⁷⁰ This notice is distributed as required by Minn. R. 7001.0100, subp. 5 (which includes circulating the public notice in the affected geographic area through postings and/or publication in local newspapers) and all interested parties are asked to submit written comments during the 30-day time period allowed for public comment. If requested, a public informational meeting is held to discuss the draft permit. The MPCA did not make further modifications to the proposed rules as a result of these comments.¹⁷¹

140. Brenda Wilcox asserted that composting facilities create bioaerosols, bacteria, molds, fungi, pathogens, gasses, and micro- and macro-organisms that may affect neighbors, particularly those who are "sensitive receptors" due to preexisting health conditions. Ms. Wilcox, Victor Wilcox, and Sandra Speck suggested that the MPCA require all applicants for compost facility permits to carry a bond and/or insurance to cover all environmental and health liabilities. They also recommended that

¹⁶⁷ MPCA's Initial Response at 33.

¹⁶⁸ Public Comment 14.

¹⁶⁹ Public Comments 20 and 99.

¹⁷⁰ See Minn. R. 7001.0100.

¹⁷¹ MPCA's Initial Response at 34.

the applicants be required to complete an Environmental Impact Statement or an Environmental Assessment Worksheet upon request by neighboring property owners.¹⁷²

141. The Agency noted in response that environmental reviews are governed by Chapter 116D of the Minnesota Statutes and Chapter 4410 of the Minnesota Rules. The latter rules include a list of projects that require a mandatory or discretionary Environmental Impact Statement or Environmental Assessment Worksheet.¹⁷³ The MPCA pointed out that it has not proposed amendments to Chapter 4410 at this time and asserted that it is not proposing insurance or financial assurance provisions in the proposed rules. As a result, it argued that these issues are outside the scope of this rulemaking proceeding.¹⁷⁴ It did acknowledge, however, that some SSOM compost facility proposals may require environmental review under the current thresholds set forth in Minn. R. 4410.4300 and 4410.4400. In addition, Minn. R. 4410.1000 provides a process for discretionary environmental review if a project “may have the potential for significant environmental effects.”¹⁷⁵

142. Brenda and Victor Wilcox questioned whether food items should be accepted for purposes of SSOM composting and asserted that Canada does not allow food to be composted using the windrow process. They contended that adding food waste to the mix of organic materials increases the amounts of molds, fungi and bacteria, makes the process harder to control, and increased the likelihood of environmental contamination and public health issues. They also expressed concern about animal wastes being accepted at compost facilities and raised questions about the impacts of large-scale composting facilities on the food chain. In particular, they asserted that crops and animals in fields located too close to composting facilities may become contaminated due to emissions of bioaerosols.¹⁷⁶

143. In response, the MPCA indicated that it was not aware of any research indicating that composting operations would have a negative impact on the food chain. To the contrary, the Agency asserted that expanded composting is likely to have positive impacts on the food chain because the addition of compost to soil improves soil health. The MPCA relied in part upon a report issued by the U.S. Environmental Protection Agency which indicated that “[c]ompost can benefit the biological, chemical, and physical properties of soil.” The Agency also stated that, while rules and guidelines may vary from one Canadian province to another, Canada as a nation does not prohibit food waste in windrow composting. The MPCA further noted that animal wastes are not allowed to be accepted under the proposed rules unless specifically permitted by the Commissioner, and indicated that a facility proposing to accept animal waste would have to submit a detailed plan for managing the material to avoid the creation of odors and other nuisances. In addition, if a facility wished to begin accepting animal waste,

¹⁷² Tr. 44-54 (Evening Session); Public Hearing Ex. 96; Public Comments 14, 20, 29, 64, 99, 103.

¹⁷³ See Minn. R. 4410.1000 and 4410.2000.

¹⁷⁴ MPCA’s Initial Response at 39; MPCA’s Rebuttal Response at 4.

¹⁷⁵ MPCA’s Rebuttal Response at 4.

¹⁷⁶ Public Comment 103.

that would constitute a major modification to its operations and it would be required to submit an application for reissuance or modification of the permit.¹⁷⁷

144. The Administrative Law Judge concludes that the proposed rules are not rendered defective by their failure to incorporate the provisions and approaches discussed above. The suggested modifications to the environmental review and notice requirements would require changes to rules that are not involved in this rulemaking proceeding, and thus cannot properly be addressed in this rulemaking proceeding.

Part-by-Part Analysis of Rules

CHAPTER 7001

Proposed Rule Part 7001.3050 – Permit Requirements

Subpart 2 - Exclusions

145. At the rule hearing, the Agency proposed a revision to Subpart 2, item A. As amended, this provision would state, “A solid waste management facility permit is not required: A. for backyard compost sites and small compost sites as defined in part 7035.0300. . . .”¹⁷⁸ The MPCA indicated that this revision was based upon a consideration of the comments received regarding the need for backyard compost sites and the Agency’s determination that small compost sites under the proposed rules “are not likely to pose the same concerns as larger permitted solid waste management facilities.”¹⁷⁹ There was no objection to this proposed revision.

146. The Agency has shown that the proposed rule, as modified at the rule hearing, is both needed and reasonable to clarify that a permit is not needed for backyard compost sites or small compost sites. The modification is a logical outgrowth of public comment during the rulemaking process and does not result in a rule that is substantially different from the rule as originally proposed.

Proposed Rule Part 7001.3375 – Final Application Information Requirements for Compost Facilities

147. The Minnesota Composting Council recommended that the Agency use the terms “storm water,” “surface water,” and “leachate” in item B rather than the terms “run-off,” “run-on,” and “contact water,” to ensure consistency with the remainder of the proposed rules.¹⁸⁰

¹⁷⁷ MPCA’s Rebuttal Response at 6.

¹⁷⁸ See Attachment 2 to MPCA’s Initial Response.

¹⁷⁹ MPCA Ex. 12.

¹⁸⁰ Public Comment 5. Several individuals and organizations noted their agreement with the Minnesota Composting Council’s comments and suggestions regarding the proposed rules and/or filed comments on the proposed rules that were substantially the same as those filed by the Minnesota Composting Council. This included Mackenthum’s Fine Foods, Water Billboards, Sarah and Bradley Linden, Greg Nelson, Jennifer Zbinden, Resource Recycling Systems, City of Mayer, Cary Oshins, We Care Organics,

148. In response, the Agency emphasized that it had not proposed any change to item B as part of this rulemaking proceeding. It pointed out that item B applies to all compost facilities, not merely SSOM compost facilities, and asserted that the terms “run-off” and “run-on” are used throughout the solid waste rules and are not specific to compost or SSOM compost facilities.¹⁸¹

149. Western Lake Superior Sanitary District suggested a revision to the language of item E. As proposed, item E requires that an application for a compost facility permit include, among other things, a description of the “disposal method” for the rejects and residuals. Western Lake Superior Sanitary District asserted that rejects and residuals “are often reused in the composting process or as a beneficial reuse product,” and suggested that the word “disposal” be replaced with “management.”¹⁸²

150. In its post-hearing response, the Agency declined to make the suggested change in the language of item E. The Agency noted that the draft rule does allow residuals to be reincorporated back into the composting process when appropriate, and emphasized that proposed rule part 7035.2836, subp. 9(B)(5), refers to the “management of residuals” and thereby uses language consistent with the suggestion of Western Lake Superior Sanitary District. It noted that the SONAR mentions that residuals must be “reincorporated back into the composting process in a timely manner or disposed of to prevent odors, litter, or vector intrusion.” In addition, the MPCA mentioned that, if a compost facility creates a mulch product that does not require further composting, that product, if approved by the Commissioner of the MPCA, would fall outside the definition of residuals since it does not “require further composting” and would not be subject to the requirements of the proposed rules for management of residuals. Finally, the Agency noted that this rule part applies to all compost facilities, not only SSOM compost facilities, and indicated that the terms “rejects” and “residuals” are used throughout the solid waste rules.¹⁸³

151. The Administrative Law Judge finds that part 7001.3410 of the proposed rules has been shown to be needed and reasonable. The failure of the Agency to make the modifications suggested does not constitute a defect in the proposed rules.

Proposed Rule Part 7001.3410 – Extended Permit Notification and Termination Procedures

152. The proposed rules amend subparts 1 and 3 of the existing rules to specify that SSOM composting facilities that are operating under an extended permit

Linden Hills Power and Light, Maria Karis, Pope Douglas Solid Waste Management, Becker County Environmental Services, Carver County, Mark Isenberg, Michael Reed, Minnesota Product Stewardship Council, Mary Chamberlain, Tim Bastian, Sarah Braman, K-POST, LLC, Eureka Recycling, Winona County, and Minnesota Mulch and Soil. See Public Comments 6, 7, 9, 11, 13, 15, 16, 17, 18, 19, 21, 22, 23, 26, 27, 30, 33, 44, 57, 58, 74, 75, 76, and 78. For efficiency, this Report will refer to the comments filed by the Minnesota Composting Council, with the understanding that the Council’s views were shared by those mentioned above.

¹⁸¹ MPCA’s Initial Response at 8.

¹⁸² Public Comment 65.

¹⁸³ Agency’s Initial Response at 8.

must provide a notification to the MPCA on the one-year anniversary of the permit and every five years thereafter. The notification must inform the Agency of any minor modifications that have been made at the facility and summarize any annual updates that the facility has made to its operations and maintenance or various other plans since the facility's prior report. Subpart 2 of the existing rule requires that owners or operators of facilities subject to subpart 1, item D, must also describe any minor modifications or plan changes in an annual report filed with the Commissioner. Proposed amendments to Subpart 3 will make it clear that an SSOM compost facility will lose its eligibility to operate under an extended permit and must be re-permitted if the facility has unresolved noncompliance or has not been operated substantially in accordance with applicable standards; has made major modifications without filing a permit application; or has failed to submit notifications or annual reports or update required plans.

153. Brenda Wilcox requested that the Agency require periodic re-permitting for all compost facilities in order to track and document long-term environmental and health effects at each location, particularly locations that were “grandfathered in before these rules came into effect.” Ms. Wilcox also asked the Agency to disclose information to townships and counties when proposing projects and hold site owners liable for any misinformation they present.¹⁸⁴

154. In response, the MPCA stated that the proposed rules will apply to all SSOM and composting facilities, and periodic re-permitting will be required under the proposed rules. According to the Agency, any facility currently operating under short-term Demonstration Research Project Agreements must meet all rule requirements when permitted. In addition, under the proposed rules, all permitted facilities must submit permit extension notification forms every five years and must also provide annual reports with information on their operations and compliance. The Agency noted that annual reports will be available to members of the public.¹⁸⁵

155. The Agency has shown that the proposed rule is needed and reasonable to clarify the conditions under which an SSOM facility will be allowed to operate under an extended permit.

CHAPTER 7035

Proposed Rule Part 7035.0300 – Definitions

Subpart 7 – Backyard compost site

156. The MPCA originally proposed to repeal the definition of “backyard compost site” currently included in the rules and instead include backyard composting within a new category of “small compost sites.” Although small compost sites were not going to be required to obtain a permit, certain regulatory requirements were set forth in the proposed rules.

¹⁸⁴ Public Comment 29.

¹⁸⁵ MPCA's Initial Response at 9.

157. Some individuals commenting on the proposed rules, including Jan Christison¹⁸⁶ and Lynn Schoenstedt,¹⁸⁷ expressed support for improving the monitoring and accountability of those engaging in composting.

158. The Minnesota Composting Council objected to the elimination of the definition and exemption of “backyard compost site.” It contended that the proposed rules were contrary to the State’s goal of encouraging composting in Minnesota and would impose a new and unnecessary burden on gardeners, urban neighborhood gardening groups, schools, and others. The Minnesota Composting Council also asserted that the MPCA lacks the staff necessary to enforce these regulatory requirements with respect to the estimated 120,000 to 150,000 backyard composters in Minnesota. It urged that the definition of “backyard compost sites” be reinstated in the rules, and that backyard composters remain exempt from all Agency regulation.¹⁸⁸

159. Many other individuals and organizations also opposed the Agency’s original proposal to fold “backyard compost sites” into the proposed new “small compost site” category, including the cities of Minneapolis, St. Louis Park, Burnsville, and Chanhassen, the Solid Waste Management Coordinating Board, Gardening Matters, Eureka Recycling, Hennepin County, Winona County, Bob Longmore, Elizabeth Lundquist, Dave Hawley, Patrick Watson, Paul Anderson, Nancy Martinetto, Dianna Hunter, Dan Hottinger, Mary Chamberlain, Rhonda McCall, Richard Vukonich, Marge Sagstetter, Kevin Cavanugh, Kyle Maher, Susan Oven, George Martin, Doug Root, Lynette and Roberta Malles, Meghan Manhatton, Betty Jo Maher, Alyce Talarico Graves, Jean Wulterkens, Gerald M. Horgan, Mike Roe, Thomas Halbach, and Kenneth Wilson.¹⁸⁹ Various individuals commenting in opposition to the proposed rules characterized this as overreaching by the Agency and questioned the need to license or regulate backyard compost sites. Many emphasized the benefits associated with composting and urged the Agency to encourage, rather than discourage, composting. Several questioned whether small backyard sites in fact cause any environmental concerns, and noted that odor or nuisance situations could be addressed by local agencies.

160. During the hearing on March 24, 2014, the MPCA emphasized that “[i]t was never [the Agency’s intention] to increase regulations” for backyard compost sites, and noted that the rule modifications applicable to facilities would not apply to small backyard sites.¹⁹⁰ However, in response to the comments received prior to the hearing, the Agency decided to re-establish a modified definition of “backyard compost site” in the proposed rules. Under the definition that is now being proposed, apartment buildings and single commercial offices would no longer be included. As modified, subpart 7 would state: “‘Backyard compost site’ means a site used to compost food scraps, garden wastes, weeds, lawn cuttings, leaves, and prunings from a single family

¹⁸⁶ Public Comment 54; Tr. 55-65 (Evening Session).

¹⁸⁷ Public Comment 61.

¹⁸⁸ Public Comments 5; see also 8, 12, 25, 50, 54, 64, 71, 75-77, 82.

¹⁸⁹ Public Comments 24, 25, 31, 35, 37-41, 43-45, 47, 49, 51-53, 55, 56, 59, 60, 62, 63, 66, 68, 69, 71, 73, 75, 76, 77, 79, 80, 82, and 83.

¹⁹⁰ Tr. 40 (Morning Session).

or household, ~~apartment building, or a single commercial office, a member of which is the owner, occupant, or lessee of the property.~~" The Agency noted that composting would still be encouraged at multifamily, commercial or institutional facilities, but such composting would fall within the "small compost site" category and would be subject to a few more requirements than backyard sites.¹⁹¹ In the view of the MPCA, this change is reasonable due to the substantial volume of material that can be handled by small compost sites and the minimal regulatory burden the proposed rules would place on small compost sites.¹⁹²

161. In addition to restoring the revised definition of "backyard compost site," the Agency also modified the proposed rules to restore the language making such sites exempt from regulation by the Agency. This change is discussed further below in connection with Part 7035.2525, subpart 2, item A.¹⁹³

162. Several of those commenting on the proposed rules, including Maria Brosofske-Wires¹⁹⁴ and Kathryn LaBine,¹⁹⁵ asserted that many gardeners and backyard composters are able to successfully compost a broader variety of organic materials than allowed under the proposed rules, including animal wastes, fish by-products, and meat by-products. Kellie Kish and Steve Kotke of the city of Minneapolis noted that backyard composters in Minneapolis are currently allowed to compost poultry litter from their chickens at their backyard sites. The city of Minneapolis, the Minnesota Composting Council, and others urged that the rules be revised to include any paper products, incidental pet waste included in leaves and grass clippings, and incidental amounts of fats, oil, grease, meat, and dairy that are typically part of cooked foods. In addition, they urged that the rules be revised to explicitly allow local governments to pass ordinances allowing additional materials to be composted so that specific geographic and hydrological conditions applicable to their localities may be taken into consideration.¹⁹⁶ The Minnesota Composting Council requested that the proposed definition be revised as follows:

'Backyard compost site' means a site used to compost food scraps that may include small quantities of fats, oils, grease, meat and dairy, nonrecyclable paper, garden wastes, weeds, lawn cuttings and leaves that may include small quantities of pet waste, prunings and other materials as approved by the local unit of government, from single family households.

The Council contends that the proposed modification would more accurately reflect current residential backyard composting practices and allow cities and organizations to educate residents about how to properly compost these materials.¹⁹⁷

¹⁹¹ *Id.* at 41; MPCA's Initial Comments at 13.

¹⁹² MPCA's Initial Comments at 13 and Attachment 2.

¹⁹³ *Id.*

¹⁹⁴ Public Comment 8.

¹⁹⁵ *Id.*

¹⁹⁶ Tr. 110-137 and 138-141; Public Ex. 91; Public Comments 71, 104.

¹⁹⁷ Tr. 110-137 (Morning Session); Public Comment 104.

163. The MPCA declined to make the modifications suggested above, and retained the definition of “backyard compost site” it had proposed at the hearing. With respect to the suggestion that local government units be allowed to add additional acceptable materials for backyard composting under local ordinances, the MPCA responded that local government units are only allowed to pass ordinances that further *restrict* the types of materials accepted at backyard compost sites; they cannot impose standards that are *less* stringent than those imposed by the State. The Agency pointed out, however, that backyard composters can choose to operate under the small compost site designation without a permit or other approval from the Agency, and emphasized that small compost sites are allowed to compost a larger array of materials than backyard compost sites. In order to operate as a small compost site, individuals would need to ensure that they follow the appropriate provisions of Parts 7035.0300, subpart 99a, and 7035.2525, subpart 2, item L.¹⁹⁸ The MPCA’s post-hearing submissions did not discuss the reasons for its decision not to incorporate the other changes requested by the Minnesota Composting Council.

164. Although the Agency proposed modifications to the rule pertaining to small compost sites to allow local governmental units to adopt ordinances expanding the list of acceptable materials when appropriate, the Agency indicated that it deliberately included this provision for small compost sites but not for backyard sites, because small compost sites have more stringent requirements than backyard sites.¹⁹⁹ This modification is discussed further below in connection with Part 7035.2525.

165. The MPCA has shown that the definition of “backyard compost site” in subpart 7 of the proposed rules, as reinstated and revised at the hearing, is needed and reasonable to address the concerns made in the prehearing comments filed by members of the public. The Agency’s failure to incorporate language in the rules allowing the composting of additional items does not constitute a defect in the rules.

Subpart 20a – Contact water

166. The proposed rules include a new definition of “contact water” to mean “water that has come into contact with source-separated organic material in the tipping area, source-separated organic material in the mixing area, rejects, residuals, or active compost.” As originally proposed, the definition went on to specify that compost is deemed to be active “until it has reached PFRP [Process to Further Reduce Pathogens] . . . and the Solvita maturity index is greater than or equal to five with ammonia greater than or equal to four.” The SONAR indicated that it is necessary to establish a definition of contact water to ensure that water generated on site is appropriately treated as either contact water or storm water, since requirements applicable to each vary significantly.²⁰⁰

167. The National Waste & Recycling Association asserted that the use of the term “contact water” to describe the liquids draining from the compost waste in the tipping/active areas of the facility was confusing. It suggested that the term “leachate”

¹⁹⁸ Agency’s Initial Response at 13.

¹⁹⁹ *Id.*

²⁰⁰ SONAR at 15.

be substituted to ensure that the language in the proposed rules matched that used elsewhere. It asserted that the term “contact water” should be reserved for the area of the site that is used for managing inert materials or storm water runoff from operations areas.²⁰¹ The MPCA did not specifically address this comment in its post-hearing submissions.

168. The Minnesota Composting Council, Carver County, Hennepin County, and Coker Composting and Consulting suggested modifications to the language of the proposed rule. The Minnesota Composting Council and Hennepin County suggested that the MPCA allow the use of the Solvita test as an indicator of compost stability, but asserted that the Agency should not endorse a specific industry testing method unless that method is being adopted as the standard. They suggested that the language of the proposed rule be amended to allow the operator to choose any test method that complies with the US Composting Council’s Test Methods for the Examination of Composting and Compost. They further proposed that the word “residuals” be removed from the definition of contact water and the word “active” be replaced with the phrase “compost that has not yet reached the curing stage.”²⁰²

169. Carver County objected to the Agency’s contention that water that contacts rejects and residuals after meeting PFRP presents a greater risk to the environment than storm water, and characterized that statement as “an unproven claim.” It asserted that, apart from being larger in size, residuals are comparable to finished compost. Carver County suggested that the definition of “residuals” be revised to state that residuals are “organic materials that have gone through the composting process and have met PRFP. Residuals may be marketed as a finished product or they may be reincorporated to further reduce their particle size.”²⁰³

170. Coker Composting and Consulting also requested that the Agency consider removing “residuals” from the list of materials that produce “contact water.” It argued that residuals are materials, like large woody pieces, that have gone through the time-temperature regime needed to inactivate pathogens and contended that any minor amounts of compost adhering to the wood after passing through a screening system is biologically stable material. Coker suggested that run-off from residual storage areas be considered storm water.²⁰⁴

171. After reviewing these comments, the Agency agreed that there was a need for more flexibility with respect to maturity testing methods and to ensure consistency with other parts of the proposed rule. As a result, the Agency modified the proposed definition of “contact water” contained in subpart 20a by adding an additional sentence to the end of the proposed definition, stating: “An owner or operator may use an alternative test method as provided by part 7035.2836, subpart 9, item B, subitems (3) and (9).” The Agency also clarified that, “once compost has reached PFRP and has

²⁰¹ Tr. 165-185 (Morning Session); Public Comment 105.

²⁰² Public Comments 5, 104, and 111.

²⁰³ Public Comment 72.

²⁰⁴ Public Comment 12.

been determined through analysis to be in the curing stage, the water leaving it may be treated as storm water.”²⁰⁵

172. The Agency has shown that the definition of “contact water,” as modified, is needed and reasonable to clarify the appropriate treatment of water generated on site. The modifications proposed by the Agency to the rule as originally published were made in response to public comment during the rulemaking proceeding and are within the scope of the matter announced in the Notice of Intent to Adopt the rules. As a result, the modified rule is not substantially different from the rule as originally proposed within the meaning of Minn. Stat. § 14.05, subd. 2. The Agency’s failure to refer to “leachate” rather than “contact water” does not render the rule defective, however, the MPCA is encouraged to consider this comment and propose further revisions in the rule to the extent deemed appropriate.

Subpart 92a – Rejects

Subpart 93b - Residuals

173. Subpart 92a of the proposed rules defines the term "rejects" in the context of SSOM compost facilities to mean:

- A. inorganic materials that cannot be rendered into a humus-like material;
- B. materials that are unacceptable due to permit conditions;
- C. materials that are unacceptable according to subpart 99a, item B [relating to the prohibition against small compost sites accepting fats, oils, grease, meat, dairy, animal manure, diapers, or sanitary products]; or
- D. materials that are unacceptable according to subpart 105a, items B [stating that SSOM does not include animal wastes, such as manure or carcasses; fish wastes generated from industrial or manufacturing processes; meat by-products generated from industrial or manufacturing processes; sanitary products; or diapers, unless specifically permitted by the MPCA Commissioner] and C [stating that SSOM does not include septage or sewage sludge].

174. In the SONAR, the Agency explained that the definition of “rejects” is included in the proposed rules in order to describe unacceptable materials that may be delivered to a compost site. It noted that the term “rejects” is also used to calculate whether a facility is exempt from the solid waste tax and stated that it is important to apply the term consistently to ensure that regulated parties are treated fairly.²⁰⁶

²⁰⁵ MPCA’s Initial Response at 9-10 and Attachment 2.

²⁰⁶ SONAR at 15.

175. The Shakopee Mdewakanton Sioux Community asserted that the proposed definition of “rejects” should make a distinction between materials that fall under item A of the definition and those that fall under items B, C, and D. It asserted that materials falling under item A cannot be separated until screening and are “environmentally benign because they mostly consist of plastic and rocks,” while materials falling under items B, C, and D should be rejected at the gate or the tipping floor or removed from the site by the end of each day.²⁰⁷

176. Subpart 93b of the proposed rules defines “residuals” in the context of SSOM compost facilities to mean “organic materials that require further composting due to their large size, such as tree branches.” In the SONAR, the MPCA indicated that a definition of “residuals” was included in the proposed rules because regulated parties and the Agency at times have interpreted the term in different ways.

177. The Western Lake Superior Sanitary District recommended that the agency remove the phrase “such as tree branches” from the definition of “residuals” because the term “tree branches” is vague and not measurable.²⁰⁸ Carver County asserted that, apart from being larger in size, residuals are comparable to finished compost. It suggested that the definition be revised to state:

As applied to source-separated organic material compost facilities, ‘residuals’ means organic materials that have gone through the composting process and have met PRFP [sic]. Residuals may be marketed as a finished product or they may be reincorporated to further reduce their particle size.²⁰⁹

178. In its post-hearing submissions, the MPCA indicated that it used the term “tree branch” in the definition of “residuals” because a tree branch “is a recognizable material that does not need further definition,” and emphasized that the example given was not exclusive.²¹⁰ The MPCA otherwise did not directly respond to the suggestions noted above. The MPCA did not make any changes to the definitions of “rejects” or “residuals” set forth in items 92a and 93b in response to these comments.

179. Several individuals and groups objected to various aspects of the definitions of “rejects” and “residuals,” and the connection between these terms and the definition of “contact water.” These comments, the Agency response, and the modifications made to the operation requirements applicable to SSOM compost facilities that are set forth in proposed rule 7035.2836, subp. 11, are discussed in detail below in connection with that rule part.

180. The MPCA has shown that the definitions of “rejects” and “residuals” set forth in the rules as proposed are needed and reasonable to clarify the Agency’s interpretations of those terms and ensure consistency. Although the failure to modify

²⁰⁷ Public Comment 1.

²⁰⁸ Public Comment 65.

²⁰⁹ Public Comment 72.

²¹⁰ MPCA’s Initial Response at 11.

the proposed rules in the manner proposed by those filing comments does not constitute a defect in the rules, the Administrative Law Judge encourages the Agency to review those suggestions and consider whether any further modifications to the rules are appropriate.

Subpart 99a – Small compost site

181. “Small compost site” is defined in the proposed rules to mean a site that is used to compost food scraps; yard waste; poultry litter generated on site only if the compost produced is used on site; nonrecyclable paper; or compostable materials meeting specified standards of the American Society for Testing and Materials. The definition further notes that small compost sites cannot accept fats, oils, grease, meat, dairy, animal manure, diapers, or sanitary products.

182. The Minnesota Composting Council, the City of Minneapolis, and many others suggested that the language be revised to allow small compost sites to accept incidental amounts of fats, oils, grease, meat, dairy, and animal manure, and other materials as approved by a local unit of government.²¹¹ Russ Henry, who operates several small compost sites, requested that the proposed rules be revised to allow the acceptance of brewery waste.²¹² Curtis Speck, Lynn Schoenstedt, Jan Christison, and others urged that there be more effective community involvement and oversight of small compost sites.²¹³

183. The Minnesota Composting Council further recommended that language be added to the definition that expressly notes that the definition encompasses community gardens, urban farms, apartment buildings, townhomes, schools, commercial offices, small businesses, and non-profits under specified circumstances. It also suggested that the rule expressly require that the site not be located in a floodplain, shoreland, or wetland, and that the regulatory requirements that apply to small composting sites be included in the definition to make it easier for the general public to find and comply with these conditions.²¹⁴

184. As originally proposed, the definition of “small compost site” included a requirement that the site “not exceed 80 cubic yards on site at any one time, including collected raw materials and compost being processed, but excluding finished compost.” Several of those commenting on the proposed rules, including the Minnesota Composting Council and numerous others, urged the MPCA to increase the proposed size restrictions. They also suggested that local governments be allowed to restrict the size further through ordinances to ensure that the needs of particular localities could appropriately be taken into consideration.²¹⁵

²¹¹ Public Comments 5, 71, 104, 111.

²¹² Tr. 141-44 (Morning Session).

²¹³ Tr. 55-65 (Evening Session); Public Hearing Ex. 97; Public Comments 14, 61, 54.

²¹⁴ Public Comment 104.

²¹⁵ Public Comments 5, 104, 111.

185. Dodge County Environmental Services asked the Agency to clarify whether the phrase “compost being processed” in the discussion of the size limitation means the “active compost stage” as defined in subpart 20a.²¹⁶ Others, including Russ Henry and Western Lake Superior Sanitary District, suggested that the MPCA revise the rule to allow certain materials, such as leaves and wood chips, not to be counted in the size limitations.²¹⁷

186. In its post-hearing submissions, the MPCA did not make any changes in the description of the items that may be accepted by small compost sites or incorporate the other changes in items A and B of the proposed rule that were suggested by the Minnesota Composting Council and others. It did, however, modify subitems C and D of the definition of “small compost site” in response to some of the comments. As modified, a “small compost site” would mean a site that:

C. does not exceed ~~80~~ 120 cubic yards on site at any one time; ~~including collected raw materials and compost being processed. But~~ excluding finished compost; and

D. is where the materials under item A are managed to minimize odor, prevent groundwater contamination, prevent surface water contamination, and avoid the creation of nuisances and public health risks.²¹⁸

As discussed in more detail below, the Agency also made revisions pertaining to small compost sites in Part 7035.2525, subpart 2, item A, and added a new item L to that provision of the rules.²¹⁹

187. In its initial post-hearing response, the Agency indicated that the modification increasing the allowed capacity of small compost facilities to 120 cubic yards was being made in response to public comment and was also consistent with regulations in other states. The Agency declined to increase the size to more than 120 cubic yards because operators of small compost sites are not required to obtain permits or undertake training. The MPCA believes that sites that wish to manage a larger quantity of material fit more appropriately into the SSOM compost facility definition and asserted that such facilities have design and operational requirements that are more suitable for managing large quantities of material. The Agency pointed out that, under the proposed rules, local governments maintain the authority to reduce the allowable size of small compost sites and establish other operating or siting requirements based on local considerations.²²⁰

188. In its revisions to the definition of “small compost site,” the MPCA also extended the materials that count toward the 120-cubic-yard total to include finished compost. The MPCA indicated that this change will prevent any possible confusion that

²¹⁶ Public Comment 3.

²¹⁷ Tr. 142-45 (Morning Session); Public Comment 66.

²¹⁸ See Attachment 2 to MPCA’s Initial Response.

²¹⁹ MPCA’s Initial Response at 15-17 and Attachment 2.

²²⁰ MPCA’s Initial Response at 16.

may have arisen from the language as originally proposed, which made a separate allowance for "finished compost." Because the size limit applies to all materials on site under the modified version of the rule, the MPCA stated that there will be no need to make a judgment call to determine when compost is "finished." In light of the modifications made to the proposed definition of backyard compost site, composting taking place in multifamily, commercial, or institutional facilities will now fall into the small compost site category.²²¹

189. As modified following the hearing, item D defines "small compost site" to mean, in part, "a site that . . . is where the materials under item A are managed to minimize odor, prevent groundwater contamination, prevent surface water contamination, and avoid the creation of nuisances and public health risks." It appears that this language was added in response to comments by the Minnesota Composting Council suggesting that the definition incorporate plain language describing the regulatory requirements that will be applied to small compost sites rather than simply citing the rules that will apply to such sites in Part 7035.2525. Although it is unusual to include such requirements in a definition, the Administrative Law Judge recognizes that this change was suggested in the hope that it would make it easier for members of the public to understand the obligations associated with operating a small compost site. This rule provision is, however, defective because it merely refers to *some* of the obligations that will be imposed on small compost sites, and because it does not describe those obligations in a sufficiently specific manner to enable the members of the public to fully understand the scope of these requirements. In addition, as discussed below in Finding 210, the Administrative Law Judge finds that the MPCA has not shown the need for or reasonableness of its proposal to modify part 7035.2525, subp. 2(L), in a manner that would exempt small compost sites from compliance with air pollution rules and soil contamination requirements. Accordingly, in order to correct the defects in item D of the definition of "small compost site," the Agency must modify the provision to (1) include the requirement that the site not be located in a floodplain, shoreland, or wetland; (2) include a reference to small compost sites' obligation to comply with air pollution rules and minimize the contamination of soils that were contained in the rule as originally proposed; and (3) cite the relevant statutory or rule provisions at the end of item D (e.g., include the phrase "as required by" followed by citations to the relevant statutes and rules). If the Agency chooses to make these changes, it will not render the rules as finally adopted substantially different from the rules as originally proposed.

190. The Agency has demonstrated that the definition of "small compost site" contained in the proposed rules, as modified by the Agency and as suggested above to cure the defect, is needed and reasonable to ensure that regulated parties will gain an adequate understanding of the new category of composting that is being recognized under the proposed rules.

²²¹ MPCA's Initial Response at 15-17 and Attachment 2.

Subpart 105a – Source-separated organic material

191. As originally proposed, subpart 105a stated that, unless specifically permitted by the Commissioner, source-separated organic material does not include animal wastes; fish wastes or meat by-products generated from industrial or manufacturing processes; sanitary products; or diapers.

192. The Minnesota Composting Council, Hennepin County, and others recommended that the rule language be revised to allow animal waste, fish waste, and meat by-products from industrial and manufacturing processes to be included as acceptable materials at SSOM composting facilities. They also suggested that language be added to the rules that would allow the Commissioner to approve additional material on a case-by-case basis in order to accommodate future requests without the need to amend the rules.²²²

193. The MPCA declined to modify the rules to allow the composting of animal waste, fish waste, and meat by-products, and asserted that those materials were excluded under the proposed rules to ensure that they are properly managed. The Agency noted, however, that Part 7001.0150 allows special conditions to be placed in a permit, and contended that this process would allow permitting staff to review the proposed management of materials that typically require additional processing or unusual composting conditions. According to the Agency, the other wastes suggested by those commenting on the proposed rules would be able to be composted under certain permit conditions.²²³

194. Coker Composting and Consulting requested that the Agency revise the portion of the rule relating to animal wastes to specifically allow co-mingled manure and bedding from equine farms and facilities such as racetracks, dressage rings, and training establishments to be included as source-separated organic material. It indicated that horse manure and bedding is often used to amend more high-nitrogen composting feedstocks to achieve the proper blended carbon:nitrogen ratio.²²⁴ The Agency declined to revise the rule in the manner suggested. It indicated that the composting of animal waste is regulated under feedlot rules²²⁵ and other agricultural regulations.²²⁶ The Agency noted that the co-mingling of manure and bedding from equine farms and facilities is not necessary in SSOM and may jeopardize the quality of SSOM compost.²²⁷

195. During the rulemaking process, the MPCA proposed a further revision to the definition of “source-separated organic material.” As finally proposed, item B²²⁸ would state: “Unless specifically permitted by the commissioner under part 7001.0150,

²²² See, e.g., Public Comments 5 and 79.

²²³ MPCA’s Initial Response at 11.

²²⁴ Public Comment 12.

²²⁵ See Minn. R. 7020.2150 (relating to manure compost sites).

²²⁶ See Minn. Stat. § 35.82, subd. 2 (relating to disposition of carcasses).

²²⁷ MPCA’s Initial Response at 12.

²²⁸ The Agency’s submission erroneously stated that this change was to subitem A.

source-separated organic material does not include: (1) animal wastes, such as manure or carcasses;”²²⁹ The MPCA noted that this change was made to clarify the Agency’s intent that the term “animal wastes” includes both animal manure and animal carcasses.²³⁰

196. The Agency has demonstrated that the definition of “source-separated organic material” is needed and reasonable. The modification proposed by the Agency during the rulemaking process was within the scope of the matters encompassed in the Notice of Hearing and originally-proposed rules, and does not constitute a substantial change.

Additional Findings regarding Definitions

197. Later provisions in the proposed rules indicate that, for purposes of subpart 9 of proposed rule part 7035.2836, “water that has come into contact with compost in the curing and finished storage areas is considered storm water”;²³¹ compost “has reached the curing stage after PFRP as described in subpart 11, item B, subitem (10), has been achieved and the Solvita maturity index is greater than or equal to five with the ammonia greater than or equal to four”;²³² and “immature compost” is defined as “not having reached the curing stage.”²³³ While it is not a defect to include these definitions in part 7035.2836, the Administrative Law Judge recommends that the Agency consider incorporating them in part 7035.0300 to improve the clarity of the proposed rules. Such a modification would not render the rules substantially different from the rules as originally proposed.

198. The portion of the proposed rules relating to location, design, and operation requirements for SSOM facilities repeatedly refer to the obligation to prevent “nuisances such as odors, vector intrusion, and aesthetic degradation.” The SONAR relating to those provisions does not elaborate on the meaning of “vector intrusion.”²³⁴ A few of the proposed rules mention the need to prevent “vectors, such as flies and

²²⁹ See Attachment 2 to MPCA’s Initial Response.

²³⁰ MPCA’s Initial Response at 11 and Attachment 2.

²³¹ Proposed part 7035.2836, subp. 9(B)(3).

²³² *Id.* This statement is repeated in proposed part 7035.2836, subp. 9(B)(9), with a slight language change to require “an ammonia test result of greater than or equal to four.”

²³³ Minn. R. 7035.2836, subpart 9, item B(4).

²³⁴ See, e.g., proposed rule parts 7035.2836, subp. 11(B)(2), (3) and (4) and SONAR at 38 (referring to the need to ensure that SSOM, salvageable and recyclable materials, and rejects and residuals are handled in a manner that “prevents nuisances such as odors, vector intrusion, and aesthetic degradation”). The Agency’s current rules also refer to the need for owners or operators of MMSW land disposal facilities and municipal solid waste combustor ash land disposal facilities to discourage “vector and burrowing animal intrusion into the site.” See Minn. R. 7035.2815, subp. 6, and Minn. R. 7035.2885, subp. 10. The existing MPCA rules also refer to the need for yard waste compost facilities and refuse-derived fuel processing facilities to store by-products in a manner that prevents “vector problems.” See Minn. R. 7035.2836, subp. 3(D), and Minn. R. 7035.2875, subp. 3(B).

rodents,” and the SONAR with respect to those provisions mentions that the term encompasses “disease vectors.”²³⁵

199. Neither Chapter 7001 nor Chapter 7035 includes a definition of the term “vector” or “vector intrusion.” The Merriam Webster Dictionary defines “vector” in relevant part as “an organism (as an insect) that transmits a pathogen.”²³⁶ “Vector attraction” is defined in the current MPCA Sewage Sludge Management rules as “the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.”²³⁷ Many individuals and organizations already involved in composting activities may have an understanding of the meaning of “vector” as used in the proposed rules, and perhaps the intended meaning may be gleaned from the two rule provisions that give the examples of flies and rodents. However, those who are new to the field and others who seek to ensure compliance with the rules may not have an understanding of what the Agency intends to encompass when it uses these terms.

200. A rule must be sufficiently specific to provide fair warning of the type of conduct to which the rule applies.²³⁸ Under the circumstances, the absence of a definition of the terms “vector” or “vector intrusion” constitutes a defect in the proposed rules. To correct this defect, the Agency must include a definition of “vector” and an explanation of what amounts to a “vector intrusion” in Part 7035.0300. For example, using the language of the “vector attraction” definition in the Sewage Sludge Management rules as guidance, “vector” could be defined to mean “rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents.” The record in this matter does not provide adequate information on which to base a suggested definition of “vector intrusion.” The inclusion of definitions of “vector” and “vector intrusion” would make a necessary clarification in the rules and would not render the rule substantially different from the rule as originally proposed.

201. If the modification to correct the defect set forth in Finding 200 is made, proposed part 7035.0300 has been shown to be needed and reasonable to notify affected parties and members of the public of the meanings of the terms used throughout the rules.

Proposed Rule Part 7035.0605 – Availability of References

202. This part of the rules describes various documents and standards that have been incorporated by reference in the rules and indicates where members of the public may find them.

²³⁵ See, e.g., proposed rule parts 7035.2836, subps. 9(B)(10) and 11(B)(9)(c) and SONAR at 31 and 40 (referring to the need to design the site to minimize disease “vectors, such as flies and rodents”).

²³⁶ Merriam-Webster’s Collegiate Dictionary at 1385 (11th ed. 2011).

²³⁷ Minn. R. 7041.0100, subp. 60.

²³⁸ *Cullen v. Kentucky*, 407 U.S. 104, 110 (1972); *Thompson v. City of Minneapolis*, 300 N.W.2d 763, 768 (Minn. 1980).

203. The proposed rules add a new provision that notes that Standards D6400 and D6868 issued by the American Society for Testing and Materials (ASTM), which relate to the labeling of plastics and polymers designed to be aerobically composted, are incorporated by reference. There were no objections to these standards being incorporated in the rules. The Administrative Law Judge finds that the proposed language meets the requirements of Minn. Stat. § 14.07, subd. 4, for a proper incorporation by reference. The Judge suggests that the Agency correct the typographical error that appears in the title of the document.²³⁹

204. Proposed rule part 7035.2836, subpart 9(b), refers to a Minnesota Department of Transportation Manual that is being incorporated by reference. For consistency, the Administrative Law Judge suggests that the language describing this manual be moved to part 7035.0605. The Administrative Law Judge further recommends that the rules expressly identify whether this manual was issued by the United States Department of Transportation or the Minnesota Department of Transportation and also indicate whether or not the manual is available through the Minitex interlibrary loan system as well as on the internet.

205. Should the suggested modifications be made by the Agency, it will serve to clarify the rules by listing all of the documents and standards that are being incorporated by reference in the same rule part, and clearly identifying where they can be found. Such a modification would not render the rules substantially different from the rules as originally proposed.

Proposed Rule Part 7035.2525 – Solid Waste Management Facilities Governed

206. This rule part sets forth general requirements that apply to owners and operators of all facilities that treat, transfer, store, process, or dispose of solid waste and also identifies various exceptions. The only portion of the current rule that the MPCA seeks to modify in this proceeding is subpart 2, relating to exceptions.

Subpart 2 - Exceptions

207. The Minnesota Composting Council, the city of Minneapolis, Russ Henry, and many others commenting on the proposed rules suggested that the Agency give local units of government the flexibility to allow small compost sites to accept materials beyond those set forth in part 7035.0300, subp. 99a, Item A.²⁴⁰

208. In response to these comments, the Agency further revised items A and L of subpart 2 during the rulemaking process, as follows:

Subpart 2. **Exceptions.** Parts 7035.2525 to 7035.2915 do not apply to the following solid waste management facilities or persons, except as indicated:

²³⁹ The title of the document in line 9.2 of the proposed rules should be corrected to read: "Standard Specifications for Labeling of End Items that e Incorporate Plastics and Polymers"

²⁴⁰ See, e.g., Tr. 141-144 (Morning Session); Public Comments 5, 71.

~~A. Small compost sites must only comply with parts 7035.2535, subpart 1, items A to E; 7035.2555; and 7035.2565 backyard compost sites;~~

* * *

L. small compost sites must only comply with parts 7035.2535, subpart 1, items A to E and 7035.2555, subparts 1 and 2, items A and B. A municipality may adopt a regulation that allows source-separated organic materials, as defined in part 7035.0300, subpart 105a, in addition to those materials defined in part 7035.0300, subpart 99a, after review by the commissioner of those additional materials and review of the provisions for control of potential impacts associated with those additional materials.²⁴¹

In essence, the Agency proposes to reinstate the reference to the exception for backyard compost sites in item A and create a new item L relating to small compost sites.

209. As originally proposed, the rules stated that small compost sites would need to comply with Minnesota Rules parts 7035.2535, subpart 1, items A to E;²⁴² 7035.2555;²⁴³ and 7035.2565.²⁴⁴ The revised version of item L proposed by the Agency would no longer require small compost sites to comply with Minn. R. 7035.2555, subpart 2, item C, or Minn. R. 7035.2565. By eliminating the reference to Minn. R. 7035.2555, subpart 2, item C, small compost sites would no longer be prohibited from being constructed in “a location where emissions of air pollutants would violate the ambient air quality standards” set forth in Chapters 7005, 7007, 7011, 7019, and 7028, and Minn. R. 7023.0100 to 7023.0120.²⁴⁵ Moreover, by eliminating the reference to Minn. R. 7035.2565, the Agency would no longer specify that small compost facilities are subject to the requirements in that provision that (1) discuss the duties of facilities to protect groundwater and surface water; (2) allow the Commissioner to designate compliance boundaries, standards, and intervention limits for compost facilities if a release could pollute or degrade ground water or surface water; (3) require that facilities be operated and maintained in conformity with air pollution control rules; and (4) require that facilities be located, designed, constructed, and operated to minimize contamination of soils from solid waste.

210. The MPCA did not discuss any reason for its proposal to delete these regulatory requirements during the hearing or in its post-hearing submissions. The fact

²⁴¹ See Attachment 2 to Agency's Initial Response.

²⁴² Minn. R. 7035.2535, subp. 1, items A through E generally prohibit acceptance of hazardous wastes, infectious wastes, used oil, radioactive waste, or sewage sludge, subject to certain exceptions.

²⁴³ Minn. R. 7035.2555 prohibits construction of facilities in a flood plain or within a shoreland, wetland, wild and scenic river land use district, or where emissions of air pollutants would violate specified ambient air quality standards.

²⁴⁴ Minn. R. 7035.2565 generally sets forth obligations to prevent pollution of ground water and surface water, minimize contamination of soils, and operate in conformity with air pollution control rules.

²⁴⁵ See Minn. R. 7035.2555, subp. 2(C).

that the Agency added language to the definition of small compost site set forth in 7035.0300, subp. 99a, stating that such sites are expected to manage materials to “minimize odor, prevent groundwater contamination, prevent surface water contamination, and avoid the creation of nuisances and public health risks,” suggests that the Agency did not intend to remove all required compliance with air and water standards. Under all of the circumstances, the Administrative Law Judge concludes that the Agency has not demonstrated the need for or reasonableness of the proposed modification to the first sentence of Item L. To correct this defect, the Administrative Law Judge suggests that first sentence of item L be revised to refer to the same regulatory requirements that were imposed on small compost sites in the rules as originally proposed. As noted above in Finding 189, the definition of “small compost site” set forth in part 7035.0300, subp. 99a, item D should also refer to the obligation of such facilities to comply with air pollution rules and minimize soil contamination, and include a cross reference to the appropriate rules.

211. Under the second sentence of the Agency’s proposed modification to item L, a municipality would be able to adopt a regulation that allows small compost sites to accept organic materials falling within the scope of part 7035.0300, subpart 105a, “after review by the commissioner of those additional materials and review of the provisions for control of potential impacts associated with those additional materials.” In its post-hearing response, the MPCA indicated that it will review provisions of local regulations relating to additional acceptable materials to ensure that the expertise of its staff regarding composting operations can be communicated to local governments during the development of local composting regulations. The MPCA also noted that the new language permitting local governments to make allowances for other types of organic material refers to the definition of SSOM in Part 7035.0300, subpart 105a, and noted that some items within that definition (particularly those set forth in item B), will require Commissioner approval to be included at small compost sites. The Agency contends that this provision is reasonable to ensure local ordinances appropriately take into account that additional materials may require more sophisticated management practices. Because the proposed rule requires that local regulations be in place before any additional materials are added, the MPCA asserted that local authorities will be better prepared to address the impacts that small compost sites may have on their communities. According to the MPCA, “[t]he existence of a local regulation will ensure that local officials have conscientiously made a decision to allow any additional acceptable materials, while preserving the environmental protections established under the rules for operating small compost sites.”²⁴⁶

212. The proposed rule as modified merely states that municipal regulations may be adopted allowing additional materials to be accepted at small compost sites “after review by the Commissioner of those additional materials and provisions for control of potential impacts associated with those additional materials as part of a proposed municipal regulation.” The rule does not describe the procedures that will be followed to obtain the Commissioner’s review (and presumably, approval) of a proposed local regulation expanding the items that may be accepted at small compost sites or set

²⁴⁶ MPCA’s Initial Response at 13.

forth any criteria to guide the Commissioner's review or approval. As noted above, a rule is required to be sufficiently specific to put the public on fair notice of what its provisions require.²⁴⁷ In addition, discretionary power may be delegated to administrative officers "[i]f the law furnishes a reasonably clear policy or standard of action which controls and guides the administrative officers in ascertaining the operative facts to which the law applies, so that the law takes effect upon these facts by virtue of its own terms, and not according to the whim or caprice of the administrative officers."²⁴⁸ The Administrative Law Judge thus concludes that the second sentence of item L is also defective because it is unduly vague and because it appears to grant unfettered discretion to the Commissioner in conducting the review and deciding whether or not to approve the municipal regulation. This defect may be corrected by either deleting the second sentence of item L or by proposing additional language to clarify the process that will be followed and the criteria that will guide the Commissioner. Because the record does not contain any information pertaining to that process or the criteria, the Administrative Law Judge is unable to suggest specific modifications that will remedy the problem.

213. The proposed rule, if modified to correct the defects noted in Findings 210 and 212 above, has been shown to be needed and reasonable to clarify the continued exemption of backyard compost sites from MPCA regulation and the standards that will apply to small compost sites.

Proposed Rule Part 7035.2836 – Compost Facilities

214. The MPCA proposes to amend part 7035.2836 of its current rules to include new requirements for the location, design, construction, and operation of SSOM compost facilities. As noted in part 7035.2525, these requirements do not apply to backyard compost sites or small compost sites. The provisions of part 7035.2836 applicable to yard waste and solid waste compost facilities have not been changed.

Subpart 8 – Location requirements for a source-separated organic material compost facility

215. This part of the proposed rules sets forth various location requirements that will apply to SSOM compost facilities. Among other things, the proposed rules require that such facilities not be constructed within five vertical feet of the water table or, unless a different distance is specified by local ordinance, within 500 feet of horizontal separation distance from the property boundary of the nearest residence, place of business, or public area (with certain exceptions).

216. In the SONAR, the MPCA noted that "water table" is defined in part 7060.0300, subp. 8, of the current rules to mean "the surface of the groundwater at which the pressure is atmospheric. Generally, this is the top of the saturated zone." The

²⁴⁷ *Cullen v. Kentucky*, 407 U.S. 104, 110 (1972); *Thompson v. City of Minneapolis*, 300 N.W.2d 763, 768 (Minn. 1980).

²⁴⁸ *Lee v. Delmont*, 228 Minn. 101, 113, 36 N.W.2d 530, 538 (1949); accord *Anderson v. Commissioner of Highways*, 126 N.W.2d 778, 780 (Minn. 1964).

MPCA stated that one stakeholder had suggested that the term be defined as "zone of continuous saturation," but the Agency had determined that it was more appropriate to be consistent and use the definition of "water table" that is already established in its rules. In addition, the Agency contended that there will be areas in the state where groundwater is "perched" and may be used as a source of drinking water, which would fall outside the stakeholder's suggested language, and asserted that "[t]he use of water table as 'generally' the top of groundwater would allow the Agency to protect these possible sources of drinking water and the underlying aquifers."²⁴⁹ With respect to the proposed requirement that facilities not be constructed within five vertical feet of the water table, the SONAR noted:

The effects of composting on ground water have yet to be fully ascertained. By keeping a separation of five vertical feet between the SSOM compost facility and the water table, some degree of natural attenuation of the compost contact water will occur before it reaches the ground water. Facility operations may be susceptible to problems when conducted in soils with high water tables because of compaction, loss of structure, rutting and erosion of the soil. Five vertical feet of separation between SSOM and the water keeps the ground water and operations separated. It should be noted that five feet of separation to the water table is required for permit-by-rule demolition facilities (Part 7035.2825, Subpart 2) and industrial waste facilities (Part 7035.1700, Item B).²⁵⁰

According to the SONAR, the MPCA considered requiring a separation of more than five vertical feet when it was drafting the proposed rules, but determined that increasing the separation would eliminate many potential sites from consideration. The MPCA maintained that the quantity of SSOM recycled through composting will likely be increased due to the significantly lower construction costs at a site that complies with the five vertical feet of separation to the water table as well as the soil types and hard-packed, all-weather surface required under the proposed rules, and noted that composting is a preferred option in the solid waste management hierarchy. The MPCA anticipates that "a compost facility constructed in this manner will be smaller in scope and that the owners would probably move toward installation of concrete or asphalt pads for operational regions as the facility grows."²⁵¹

217. Several individuals and groups, including the Solid Waste Management Coordinating Board, the Minnesota Composting Council, the city of Chanhassen, Dale Denn, and Carver, Winona, and Hennepin Counties, recommended that the MPCA use a different definition of "water table" in the proposed rules, rather than incorporating the definition used for other solid waste facilities. They also contended that the MPCA had presented insufficient scientific data to support the required five-foot vertical separation to the water table. Despite questioning the basis for the requirement, the Minnesota Composting Council found the requirement in the proposed rules for the five-foot

²⁴⁹ SONAR at 22.

²⁵⁰ *Id.*

²⁵¹ *Id.* at 22-23.

distance from the water table to be acceptable.²⁵² However, others asserted that the five-foot separation requirement was too restrictive and argued that a smaller distance would be sufficient and would also be consistent with other regulations, such as those applicable to septic systems. Several of those commenting on the proposed rules also recommended that the rules require the use of a geologist or soil scientist to determine the required distances.²⁵³

218. Others commenting on the proposed rules, including SKB Environmental²⁵⁴ and the Minnesota Chapter of the National Waste & Recycling Association,²⁵⁵ argued that the rules are too permissive and that the five-foot separation requirement was not sufficiently protective of groundwater. For example, James Aiken, a hydrogeologist representing the Minnesota Chapter of the National Waste & Recycling Association, questioned the basis for the five-foot separation requirement and the hard-packed pad for certain soil types. He also asserted that the proposed rules were inconsistent with non-degradation standards based on the available data referenced in the MPCA's pilot study with Carver County, and that the implementation of the rules will likely result in groundwater contamination.²⁵⁶

219. The Agency did not propose any change to the language of this subpart in response to these comments. In its post-hearing response, the MPCA reiterated that it had decided to use the existing definition of "water table" based upon its determination that it was more appropriate to use a consistent definition of the term.²⁵⁷ In addition, the Agency emphasized that the SONAR had discussed the need for interpretations contained within the soil survey for the site to be "verified by the use of soil borings, piezometers and/or test pits as certified by a soil scientist, engineer or geologist licensed by the state of Minnesota, with expertise in soils characterization as defined by education and experience."²⁵⁸ The MPCA noted in its post-hearing response that the most commonly-accepted means to determine that a five-foot separation distance to the water table exists is to use redoximorphic features in the soils, water elevations in piezometers once a month for twelve months, or follow other methods as approved by the Commissioner. It noted that a soil scientist, engineer, or geologist licensed in Minnesota with expertise in soils characterization should be able to verify that this condition is met.²⁵⁹

220. As noted above, subpart 8, item D, of the proposed rules also generally prohibits a SSOM facility from being constructed "within 500 feet horizontal separation distance as measured from the closest edge of all compost activities to the closest edge of a property boundary of the nearest residence, place of business, or public area, such as parks, wildlife areas, and public buildings." The proposed rule acknowledges that

²⁵² See, e.g., Public Comment 104.

²⁵³ See, e.g., Tr. 124-126, 146-160 (Morning Session); Public Comments 5, 25, 32, 72, 76, 77, and 79.

²⁵⁴ Public Comment 4.

²⁵⁵ Public Comment 67.

²⁵⁶ Tr. at 53 (Morning Session); Public Comment 67.

²⁵⁷ MPCA's Initial Response at 18.

²⁵⁸ *Id.*, quoting SONAR at 29.

²⁵⁹ MPCA's Initial Response at 18.

exceptions to this requirement will exist if a different distance is specified by a local ordinance. In addition, the proposed rule will allow facilities to seek the approval of the Commissioner to decrease the 500-foot horizontal separation distance if operational modifications, geographic features, or other natural or man-made physical characteristics reduce nuisance conditions such as noise, litter, and odor. Finally, adjacent commercial activities operated by the owner of the facility are excluded from the 500-foot horizontal separation requirement.²⁶⁰

221. Brenda and Victor Wilcox provided testimony during the hearing and also written comments in which they objected to the 500-foot setback requirement as extremely inadequate. They asserted that the MPCA has stated in public meetings that bioaerosols from the compost site are above normal background levels at 800 feet. They also urged that setbacks be site-specific and based upon the type of facility, its location, local environmental factors, and the amount of waste to be processed. Finally, they argued that a facility should not be allowed to construct a structure or feature in order to replace the distance buffer because compost releases bioaerosols, pathogens, and bacteria that are airborne. They believe there is no substitute for having the horizontal distance buffer.²⁶¹

222. The Agency declined to make any changes to item D in response to these comments. It noted that the rules would allow local governments to adopt different setback requirements if local conditions or values support establishing a different setback requirement. It also emphasized that the setback provision applies in conjunction with the site, construction, and operations requirements set forth in the proposed rules, and stated that it believes the 500-foot setback is sufficient to mitigate off-site impacts as long as the facility is sited, constructed and operated in accordance with the proposed rules. The Agency further asserted that natural features such as bluffs and trees can provide adequate separation to minimize nuisance conditions, and a constructed wall or berm may provide the necessary separation between compost activities and neighboring residences. In response to Ms. Wilcox's suggestion that an "opt-out plan" should be available for area residents who do not feel safe living next to a composting facility, the MPCA noted that local government zoning would be the appropriate mechanism for prohibiting certain types of land uses in certain areas.²⁶²

223. Jan Christison suggested that the proposed rules require that rodent-proof containers be used for compost. She also recommended that the Agency include location-specific standards and educate local officials to ensure that single-family homes are not affected by the improper composting activities of larger developments in a neighborhood.²⁶³

224. The MPCA did not make any changes in the language of the proposed rule in response to the concerns raised by Ms. Christison. It did, however, reiterate that

²⁶⁰ It appears that there may be a typographical error in the last clause of subpart 8(D)(2) and that the rule language should be corrected to state "from the owner's residence or place of business."

²⁶¹ Tr. 44-54 (Evening Session); Public Ex. 96; Public Comments 29, 64, and 103.

²⁶² MPCA's Initial Response at 19-20.

²⁶³ Tr. 55-65 (Evening Session); Public Ex. 97.

the proposed rules will require small compost facilities to operate in a manner that controls nuisance conditions and emphasized that the MPCA would have regulatory authority and could take enforcement action against any site that does not control nuisance conditions. The Agency stated that providing education to local governments and all composters is a priority for the Agency.²⁶⁴

225. The MPCA has demonstrated that subpart 8 of the proposed rules contains a needed and reasonable description of the location requirements for SSOM facilities. While the Agency is encouraged to consider including language in the rules requiring that facilities retain individuals with particular qualifications to determine the required distances from the water table, the rules are not rendered defective by their failure to include such a provision.

Subpart 9 – Design requirements for a source-separated organic material compost facility

226. Subpart 9 of the proposed rules sets forth various design requirements for SSOM facilities. Item A requires that the owner or operator of a SSOM facility must submit an engineering design report to the MPCA Commissioner for approval at the time that the facility applies for a permit, and item B specifies that the engineering design report must comply with 10 separate requirements. The requirements set forth in proposed item B(8) of subpart 9 received significant public comment and are discussed below.

Subpart 9(B)(8)

227. Proposed subitem 8 of item B sets forth the soil requirements that a SSOM compost site must meet in order to avoid having to install the “pad system” discussed in subitem 9. This area of the proposed rule attracted significant comment and opposition from members of the public.

228. Under subitem 8, a site need not be designed to include a pad system if it has “at least five feet of any combination of the following soil types comprising the soil profile above the water table: sandy clay loam, sandy clay, clay loam, silty clay loam, silty clay, and clay.” The soil profile must be characterized by the use of soil borings, piezometers, or test pits as certified by a Minnesota-licensed soil scientist, engineer, or geologist, or alternative methods approved by the Commissioner. In addition, the owner or operator may use an alternative separation distance that is approved by the Commissioner as equivalent if, during the previous five years, the site has experienced an abnormally wet or dry period and the elevation of the water table at the site has changed. The proposed rules specify that the alternative separation distance “must maintain a sufficient distance between the water table and compost activities to account for the movement of the water table through normal wet and dry years.” If a site cannot satisfy these criteria, the proposed rules require that a pad system be installed in “all areas where source-separated organic materials will be managed and composted prior to curing,” in accordance with the requirements set forth in subitem 9.

²⁶⁴ MPCA’s Initial Response at 20.

229. In the SONAR, the MPCA indicated that the proposed rules require these specified “finer-grained” soils in order to “retard infiltration and further promote attenuation.” The Agency proposed to require five feet of these finer-textured soils in order to reduce the potential for groundwater contamination, consistent with the non-degradation policy established in Minnesota Rules Chapter 7060 preventing pollution of the underground waters of the state. The MPCA stated that the soil requirement set forth in subitem 8 “prohibits facilities from being located in areas that have highly permeable soils unless an impervious pad is constructed.” In order to determine which soil types would be appropriately protective, the Agency indicated that it examined the documented average permeability of loam, silt loam, silt, clay loam, sandy clay, sandy clay loam, silty clay loam, silty clay, and clay. Based on this analysis, the SONAR noted that the MPCA decided that loam, silt loam, and silt should not be included in the proposed rules due to their “highly permeable” nature.²⁶⁵

230. Many of those commenting on the proposed rules, including the Solid Waste Management Coordinating Board,²⁶⁶ the Minnesota Composting Council,²⁶⁷ American Engineering Testing,²⁶⁸ the city of Chanhassen,²⁶⁹ Dale Denn,²⁷⁰ Brita and Phil Sailer,²⁷¹ the US Composting Council,²⁷² Carver County,²⁷³ Hennepin County,²⁷⁴ and the University of Minnesota,²⁷⁵ suggested that the proposed rules are too restrictive and lack a sufficient scientific basis with respect to the soil types listed in subitem 8. They noted that a previous draft of the proposed rules had mentioned a total of nine soil types and questioned the reason for the deletion of the references to loam, silt loam, and silt from the rules as finally proposed for adoption.

231. The Solid Waste Management Coordinating Board voiced strong objections to the proposed rules and urged that the three soils that had been included in the earlier drafts of the rules be included. It contended that, under the current version of the proposed rules, the most common soils in Minnesota would no longer be acceptable. As a result, it expressed concern that the rules will severely limit the number of acceptable sites for compost facilities and hinder the State’s ability to meet organic composting goals. The Coordinating Board also asserted that the MPCA is improperly ignoring the guidance of Model Compost Rule Template adopted by the US Composting Council in April 2013.²⁷⁶ Robert Kaiser and others indicated that the SONAR mischaracterizes loam, silt loam, and silt as “highly” permeable, and stated that those soils are accurately characterized as “moderately” permeable and should be

²⁶⁵ SONAR at 27-28.

²⁶⁶ Tr. at 66-80 (Morning Session); Public Hearing Ex. 87; Public Comments 77 and 109.

²⁶⁷ Public Comment 5; Tr. at 104-09 (Morning Session).

²⁶⁸ Tr. 105-110 (Morning Session); see also April 10, 2014, report attached to Public Comment 109.

²⁶⁹ Public Comment 25.

²⁷⁰ Public Comment 32.

²⁷¹ Public Comment 36.

²⁷² Public Comment 48.

²⁷³ Public Comment 72.

²⁷⁴ Tr. 153-157; Public Comment 79.

²⁷⁵ Public Comment 102.

²⁷⁶ Tr. at 67-80 (Morning Session); Public Ex. 87; Public Comments 77 and 109.

reinstated in the proposed rules.²⁷⁷ Ali Durgunoglu of Hennepin County contended that those three soils as well as sandy loam have performed well in eliminating groundwater pollution and should be characterized in the proposed rules as acceptable soil types.²⁷⁸ The Minnesota Composting Council asserted that the Agency's decision to remove the three soil types were based on "flawed" preliminary information from the 2014 Carver County Project.²⁷⁹ Carver County emphasized that, based on the MPCA's estimated costs as set forth in the SONAR, the cost of a ten-acre site would be approximately \$50,000 where adequate soil types or separation distances are present, but would increase to \$1,500,000 where a pad is required.²⁸⁰

232. At the request of the Minnesota Composting Council, American Engineering Testing, Inc. (AET), conducted an evaluation of the preliminary data from the 2014 Carver County Project; the permeability of the hard-packed, all-weather surface contemplated by the proposed rules; the impact of the removal of loam, silt loam, and silt; and the hydrological analysis provided by the National Waste & Recycling Association. Among other things, the AET concluded that the metals found in the preliminary water sample data from the 2014 Carver County Project were "primarily due to the presence of sediment in the water samples" and indicated that the "use of unfiltered water sample results for evaluating ground water impacts and comparison to drinking water standards is not appropriate as the sediment is easily removed as the water moves through soil." AET asserted that "drinking water standards are based on water that has been filtered to remove suspended solids." It also found that it was not appropriate to compare the unfiltered water sample data to filtered landfill leachate data. Based on its calculation of the surface area of Minnesota soil/material types using Minnesota *Soil Atlas* Geographic Information Systems files, AET determined that "only 7 percent of the surface area of Minnesota would have soil/materials that would be suitable as compost facility in-situ materials in the five feet below the ground surface." It noted that, "[i]f loamy soils are included, 68 percent of the surface area of Minnesota would be suitable as in-situ materials in the five feet below the ground surface at compost facilities." AET expressed its opinion that a hard-packed surface of Class 5 or Class 6 (as defined by Minnesota Department of Transportation Standard Specifications for Construction) "will be an adequate impervious surface that retards infiltration and promotes natural attenuation for a SSOM compost operation" and that the permeability of such surfaces "does not exceed the maximum permeability of a clay loam, sandy clay, sandy clay loam, and silty clay loam" as described in the SONAR. Finally, AET concluded that the hydrological study presented by the National Waste & Recycling Association was "based on a flawed conceptual model and erroneous evaluation of the compost contact water data resulting in erroneous and highly biased conclusions."²⁸¹

233. Carver County, the Minnesota Composting Council, and the Solid Waste Management Coordinating Board urged that the nine soil types be reinstated and the

²⁷⁷ See, e.g., Tr. 105-110 (Morning Session) and April 10, 2014, report attached to Public Comment 109.

²⁷⁸ Tr. 153-64 and 191-96 (Morning Session).

²⁷⁹ Public Comments 5, 104, 111.

²⁸⁰ Public Comment 107, *citing* SONAR at 50.

²⁸¹ The AET report is attached to Public Comment 109.

proposed rules instead establish permeability standards for compacted all-weather drivable pads.²⁸²

234. In its post-hearing response, the MPCA stated that it had eliminated the three soil types from the proposed rules because those soils have higher rates of permeability than the soils allowed under the rules. It indicated that the Agency had decided to take a more conservative and protective approach after it reviewed preliminary data from phase 2 of the 2014 Carver County project which suggested "a previously unrecognized potential for water quality impacts."²⁸³ The Agency emphasized that the Soil Permeability Chart set forth in the SONAR²⁸⁴ reflects a combination of information collected from multiple reference documents, as noted in Agency Exhibit 15. The MPCA stated that its intent in the SONAR was not to categorize the three soil types that were eliminated from the proposed rules as "highly permeable" since "there is no commonly-accepted scale and limit at which soil would be 'highly permeable,'" and clarified that its intent was simply to describe these soils as "more highly permeable" than the other soils mentioned. The Agency corrected page 28 of the SONAR to describe the three soils as "more highly permeable" rather than "highly permeable."²⁸⁵ The Agency asserted that the language contained in the SONAR reflects the best judgment of its staff based on available reference material and their professional knowledge and experience as social scientists, professional engineers, and professional geologists.²⁸⁶

235. In response to concerns raised by the Solid Waste Management Coordinating Board regarding the Commissioner's authority to consider conditions unique to specific sites, the MPCA noted that the proposed rules would give the Commissioner the discretion to approve alternative liner systems if certain criteria are met. The MPCA indicated in its post-hearing submission that this could include a site that does not meet the soil requirement but has installed groundwater monitoring.²⁸⁷ In response to an additional inquiry from Dodge County Environmental Services,²⁸⁸ the MPCA noted that owners and operators could ask the Commissioner to consider approving an alternative design under which an additional foot of clay loam could be added to a site that had four feet of natural in-place clay loam above the water table.²⁸⁹

236. The MPCA provided a response to the AET report in its post-hearing rebuttal. It indicated that this report "is another example of the challenge faced by MPCA from varying perspectives on the same data and information."²⁹⁰ According to the Agency, the AET report "makes multiple assertions related to the Carver County project that are not accurate." For example, the Agency disagreed with AET's statement that "compost piles are generally not saturated, would not have free flowing water

²⁸² Public Comments 104, 107, and 109.

²⁸³ MPCA's Initial Response at 6.

²⁸⁴ SONAR at 28.

²⁸⁵ MPCA's Initial Response at 21-22, 43.

²⁸⁶ MPCA's Initial Response at 21.

²⁸⁷ MPCA's Initial Response at 22.

²⁸⁸ Public Comment 3.

²⁸⁹ MPCA's Initial Response at 22.

²⁹⁰ MPCA's Rebuttal Response at 12.

moving vertically through the compost pile, and would not have had a hydraulic head build up at the base of the compost pile.” The MPCA indicated that this statement reflects the initial hypothesis of the third Carver County project, but “the rain simulation study resulted in free-flowing water moving vertically through the compost pile, raising concerns about the hypothesis and execution of the simulations.” The MPCA also objected to the statement in the AET report which indicated that “sediment in water moving through soil is easily and quickly removed by soil filtration and attenuation processes.” The Agency asserted that it is inaccurate to characterize sediment as “easily and quickly removed.” It contended that “[a]ttenuation of chemicals in soils and groundwater is complex, and depends on many factors including soil texture, structure, organic matter, type of clay and cation exchange capacity, aquifer characteristics, and the composition, strength, duration and volume of the water applied.” The Agency reiterated in its rebuttal:

[T]he preliminary data from the third Carver County project was considered by the MPCA in context with other studies and information in developing the proposed rule. The Carver County study, along with other research considered by the [A]gency, do not provide enough information to make conclusive determinations about the two issues described above. As such, the Agency included siting, design and operating criteria that ensure contact water is managed in a manner that is protective of groundwater.²⁹¹

237. It is clear that reasonable minds are divided about the effect composting activities may have on groundwater, the weight and interpretation that should be given to the preliminary data from the 2014 Carver County Project, and what soil requirements will provide adequate protection. The Administrative Law Judge finds that the MPCA has provided an adequate explanation for its selection of the six soil types approved under the proposed rules. The Agency has also provided a sufficient explanation of the evidence on which it is relying and how the evidence connects rationally with the approach it has chosen to take in the proposed rules, in accordance with applicable case law.²⁹² It is clear that the choice made by the Agency is more restrictive than some would prefer and more permissive than others would prefer. It is also apparent that the MPCA is giving more weight to the preliminary information from the 2014 Carver County Project than others believe is warranted. It is also evident that the MPCA believes that existing research does not provide sufficient information to make conclusive determinations about potential groundwater impacts and that, due to this uncertainty, the proposed rules should include “siting, design and operating criteria that ensure contact water is managed in a manner that is protective of groundwater.” Under all of the circumstances, the Administrative Law Judge finds that the choice made by the Agency is one that a rational person could have made and is not arbitrary or unreasonable. Accordingly, the Administrative Law Judge finds that the Agency has adequately demonstrated the need for and reasonableness of subpart 9(B)(8) of the proposed rules.

²⁹¹ *Id.* at 12-13.

²⁹² *Manufactured Hous. Inst. v. Pettersen*, 347 N.W.2d at 244.

Subpart 10 – Construction requirements for a source-separated organic material compost facility

238. Subpart 10 of the proposed rules sets forth construction requirements for SSOM compost facilities. Among other things, item E requires that the seams joining the panels of flexible membranes “must be air tested and field seams must be tested for tensile strength.”

239. In the SONAR, the Agency indicated that “seam testing is critical to the performance of the flexible membrane” because “the field seaming of membrane panels is perhaps the weakest point in the construction.” It noted that quality control mechanisms are followed at the factory in forming some seams before the membrane is shipped to a facility but emphasized that it is important to inspect membranes as they are placed in the field to ensure that seaming and placement activity minimizes the probability of flaws in the seams. According to the SONAR, air testing is the most frequently used nondestructive method to determine seam continuity, and destructive testing conducted as part of a systematic sampling scheme is required to determine seam integrity. Although the sample is typically taken to a laboratory for strength analyses, the MPCA stated that some field testing must also be conducted to show the quality of work performed. The SONAR indicated that the tensile test is a destructive strength test suitable for use in the field, and that field testing of flexible membrane seams for quality of installation is standard practice.²⁹³

240. Lyon County²⁹⁴ and Crow Wing County²⁹⁵ suggested that alternative wording be included in item E to allow different types of seam welding for extrusion and fusion welds. In particular, they suggested that the rule specify that seams must be “air pressure or vacuum tested.”

241. The MPCA responded that the language contained in the proposed rules for the testing of different types of seams reflects the standard wording used in the lining material industry. The Agency indicated that it had incorporated this language in the proposed rules in order to avoid any confusion with what is widely understood and accepted in the lining industry.²⁹⁶

242. The Agency has shown that subpart 10 is needed and reasonable to describe the requirements that must be included in the project specifications to ensure quality construction of SSOM facilities. The MPCA’s decision not to include the alternative wording of item E suggested by members of the public does not constitute a defect in the proposed rules.

²⁹³ SONAR at 33-34.

²⁹⁴ Public Comment 42.

²⁹⁵ Public Comment 81.

²⁹⁶ MPCA’s Initial Response at 23.

Subpart 11 – Operation requirements for a source-separated organic material compost facility

243. Subpart 11 of the proposed rules specifies various operation requirements for a SSOM compost facility. Item A requires that owners or operators submit an operation and maintenance manual to the Commissioner for approval along with its facility permit application. The manual is required to include a source-separated organic materials management plan, a personnel training program plan, a contact water management plan, a storm water management plan, an odor management plan, and a compost sampling plan. Item B sets forth sixteen separate requirements which the facility operations must, at a minimum, satisfy. Those that received significant comment are discussed below.

Subpart 11(B)(4)

244. Proposed subitem 4 requires that all rejects and residuals must be stored to prevent nuisances and managed to prevent the generation of contact water. As originally proposed, subitem 4 further required that “[a]ll contact water from residuals and residuals storage areas must be diverted to the contact water collection and treatment system.”

245. Full Circle Organics offered alternative language that would eliminate the term "residuals" from subpart 11, item B, and add a requirement that rejects be removed from the screening area after ten days.²⁹⁷

246. The MPCA declined to make the suggested change. It indicated that, in light of the requirement that SSOM facilities submit proposed operation and maintenance manuals for approval, it does not believe it is necessary to set a rigid time for removal of rejects from the screening area in the proposed rules.²⁹⁸

247. Several members of the public, including the Shakopee Mdewakanton Sioux Community,²⁹⁹ the Minnesota Composting Council,³⁰⁰ Coker Composting and Consulting,³⁰¹ the U.S. Composting Council,³⁰² the Western Lake Superior Sanitary District,³⁰³ and Hennepin County,³⁰⁴ objected to the requirement in the proposed rules requiring that water that is in contact with residuals be managed as contact water and be diverted to a facility’s contact water collection and treatment system. They maintained that residuals that have completed the PFRP process pose little risk to human health and the environment, and contended that residuals should not be required to be managed in the same way as uncomposted SSOM and other material that has not completed the PFRP process. For example, the Minnesota Composting

²⁹⁷ Public Comment 28.

²⁹⁸ MPCA’s Initial Response at 24.

²⁹⁹ Public Comment 1.

³⁰⁰ Public Comment 5.

³⁰¹ Public Comment 12.

³⁰² Public Comment 48.

³⁰³ Public Comment 65.

³⁰⁴ Public Comment 79.

Council asserted that residuals consist of “woody materials” that have met the PFRP process and may be marketed as is or reincorporated into the composting process for further particle size reduction. The Shakopee Mdewakanton Sioux Community asserted that the proposed rule “unduly treats residuals as rejects” and maintained that it is inconsistent for the proposed rules to allow curing compost to be off-pad but not allow residuals to be off-pad because those residuals have already gone through the composting process. Hennepin County also objected to this provision of the proposed rules and suggested that the Agency revise the proposed rules to allow rejects to be stored off-pad in a nuisance-free manner for up to 30 days. The US Composting Council noted that residuals “consist of oversize material that is used as a feedstock for the composting process” and asserted that “[a]ny residual that has gone through the PFRP poses no increased risk to human health and the environment.” It and others argued that the proposed language will cause “unnecessary and expensive” changes in facility operations, and urged that residuals should be allowed to be stored off the pad.

248. Based upon consideration of these comments, the MPCA agreed that additional flexibility should be included in the proposed rules with respect to the management of water that is in contact with residuals. As a result, the Agency proposed the following further revisions to subpart 11, item B, subitem 4:

All rejects and residuals must be stored to prevent nuisances such as odors, vector intrusion, and aesthetic degradation. All rejects and residuals must be managed to prevent the generation of contact water. All contact water from ~~residuals~~ rejects and residuals storage areas must be diverted to a collection and treatment system. Upon demonstration that residuals are free of rejects and usable without further composting, the Commissioner may approve an exception to contact water requirements for residuals.³⁰⁵

249. According to the MPCA, the new language sets forth a procedure by which facility operators may receive permission to store residuals that require no further composting and are free of rejects off of the contact water management pad. It indicated that residuals that are contaminated with rejects should be managed the same as rejects. According to the Agency, it deliberately chose to include the term “free of rejects” in the proposed rules rather than setting an allowable percentage because the Agency expects facilities to make all efforts to minimize contamination. The MPCA believes that it would be difficult and potentially costly for it to enforce a specific quantitative level of contamination, and it would be difficult for the facility to show compliance with such a standard. The Agency further indicated that “[t]he term ‘free of rejects’ is not intended to indicate that the presence of an incidental reject would prevent a facility from applying for and receiving the exception to the contact water requirements.” The MPCA reiterated that, if a compost facility creates a mulch product that does not require further composting, such a product (with Commissioner approval)

³⁰⁵ See Attachment 2 to MPCA’s Initial Response.

would fall outside the definition of residuals and would not be subject to the rule requirements for management of residuals.³⁰⁶

250. During the public hearing, Trudy Richter commented that the proposed rule language requiring that residuals be “free of rejects” was not workable. She recommended that the rule be revised to state: “Residuals with four percent or less of rejects or where a market exists without further composting shall be exempt from the contact water requirements for residuals.” She indicated that incorporation of a “four percent or less” standard is logical because that is the standard applied to finished compost. She further suggested that the word “or” separate the two clauses so that the exemption will apply if either circumstance occurs. She pointed out that this modification will ensure that operators themselves can determine on site whether particular residuals are exempt from the contact water requirements, without constantly having MPCA staff or others come to the facility to check.³⁰⁷ Ginny Black, Chair of the Minnesota Composting Council, testified that finished compost is allowed to have up to three percent inerts, and commented that it is illogical that the proposed rules require residuals be held to a much higher standard.³⁰⁸ Doug Johnson, who testified on behalf of the Minnesota Compost Council, also suggested that the proposed rules specify a particular percentage of rejects that will be allowed.³⁰⁹

251. The Administrative Law Judge concludes that the Agency has not shown that it is needed or reasonable to require that residuals be “free of rejects” to qualify for the exception. The SONAR makes it clear that the MPCA does not intend to apply a “free of rejects” standard when determining if an exception will be granted, but instead will tolerate “the presence of an incidental reject.” Under the circumstances, the Agency has not shown by an affirmative presentation of fact that there is a proper basis to include this standard in proposed rule. The rule language proposed by the Agency does not provide adequate notice to regulated parties of the circumstances under which the Commissioner will approve an exception to contact water requirements for residuals. In fact, regulated parties who simply read the rule language and are not familiar with the SONAR or the Agency’s interpretation of the rule might be discouraged from applying for an exception if they are not able to show that their residuals are “reject-free.” This constitutes a defect in the proposed rule.

252. The proposed language in item L is also defective because it is unduly vague and vests unfettered discretion in the Commissioner. A rule must be sufficiently specific to provide fair warning of the type of conduct to which the rule applies.³¹⁰ Discretionary power may be delegated to administrative officers “[i]f the law furnishes a reasonably clear policy or standard of action which controls and guides the administrative officers in ascertaining the operative facts to which the law applies, so that the law takes effect upon these facts by virtue of its own terms, and not according

³⁰⁶ MPCA’s Initial Response at 25-26.

³⁰⁷ Tr. 66-68 (Evening Session).

³⁰⁸ Tr. 123-24 (Morning Session).

³⁰⁹ Tr. 63-64 (Morning Session).

³¹⁰ *Cullen v. Kentucky*, 407 U.S. 104, 110 (1972); *Thompson v. City of Minneapolis*, 300 N.W.2d 763, 768 (Minn. 1980).

to the whim or caprice of the administrative officers."³¹¹ The rule as proposed makes no mention of whether the exception would be granted to a facility in the initial permit that is issued; if it would be granted on a continuing basis after an initial demonstration that the standard has been met over a particular period of time; or if it would only be granted on a case-by-case basis following repeated inspections of residuals at a facility.³¹² Moreover, by stating that the Commissioner "may" approve an exception to the contact water requirements if the required demonstration is made, the proposed rule appears to grant unfettered discretion to the Commissioner to grant or not grant approval. No criteria are included in the rule to guide the Commissioner in making that determination.

253. Given the uncertainties about the intended operation of this provision, it is difficult to suggest language to correct the defects noted in Findings 251 and 252, apart from the need to include some statement as to the percentage or amount of rejects that will be allowable. One option might be to substitute language along the following lines: "The commissioner shall grant an exception to contact water requirements for residuals if the owner or operator demonstrates during the permit application process or during a site inspection that residuals contain less than three percent rejects and are marketable without further composting." Such a modification would not render the proposed rules substantially different than the rules as originally proposed.

254. If further modified to correct the defect, subpart 11(B)(4), as revised by the Agency after the hearing, has been shown to be needed and reasonable to describe storage requirements pertaining to rejects and residuals. The modifications proposed by the Agency and the modification suggested by the Administrative Law Judge to correct the defect does not render the rule substantially different from the rule as originally proposed.

Subpart 11(B)(9)

255. Specialized Environmental Technologies, Inc., asked the MPCA to clarify the requirement in subitem 9(a) of the proposed rules which requires the owner or operator to develop and maintain a source-separated organic material management plan that, at a minimum, "include[s] a waste analysis plan to characterize source-separated organic materials prior to acceptance at the facility."³¹³

256. In response, the Agency indicated that the organic material management plan required in the proposed rules must include: (1) a description of the waste types to be handled; (2) a discussion of how the owner or operator will manage each material; and (3) a description of the process that will be followed when evaluating a potential new organic material to determine acceptability, including a procedure for determining

³¹¹ *Lee v. Delmont*, 228 Minn. 101, 113, 36 N.W.2d 530, 538 (1949); *accord Anderson v. Commissioner of Highways*, 126 N.W.2d 778, 780 (Minn. 1964).

³¹² During the rule hearing, Lisa Mojsiej of the MPCA indicated that, for sites that are already operating, the Agency's permitting and compliance staff "could do site visits and inspect the material," and, for sites that are just starting up, "it may be something that could be drawn out in an operations plan how the facility would ensure that the materials are free of rejects and do not need further composting." Tr. at 65 (Morning Session).

³¹³ Public Comment 70.

the analyses necessary to accept and compost each type of material. The Agency further noted that this plan should be updated whenever the management practices or acceptable organic materials change.

257. Although the language of subitem 9 is not defective as proposed, the additional explanation offered by the Agency discussed in the previous Finding would be helpful in clarifying the intent of this rule provision. The Administrative Law Judge recommends that the Agency consider incorporating the additional explanation set forth in the prior Finding in the language of the proposed rule in order to clarify its expectations regarding the waste analysis plan. Such a modification would serve to make the provisions of the proposed rule more specific, in response to public comments, and would not render the rules substantially different from the rule as originally proposed.

Subpart 11(B)(10)

258. Subitem 10 of the proposed rules states that compost must be produced by a process to further reduce pathogens (PFRP) and imposes requirements to monitor and record the temperature and retention time for material being composted each working day until PFRP is achieved, and weekly thereafter. It also describes three acceptable methods of PFRP: (a) the windrow method, which consists of “an unconfined composting process involving periodic aeration and mixing”; (b) the static aerated windrow method, which consists of “an unconfined composting process involving mechanical aeration of insulated compost piles”; and (c) the enclosed vessel method, which consists of “a confined compost process involving mechanical mixing of compost under controlled environmental conditions.”

259. In the SONAR, the Agency explained that the PFRP process is designed to use time and temperature to reduce, to the greatest extent feasible, the pathogens that may be present in organic materials when they are delivered to the compost facility. The Agency asserted that the proposed rules describe the composting method that will be allowed at SSOM facilities and set forth the specific time and temperature requirements that will ensure the highest destruction of pathogens.³¹⁴

260. Coker Composting and Consulting suggested that the MPCA modify the temperature-monitoring requirements to refer to “every other day” rather than “each working day” until PFRP is reached. It also asserted that monitoring temperature both before and after turning would provide no useful information and would add considerable cost to the composting facility.³¹⁵

261. In response, the MPCA indicated that the PRFP requirements set forth in part 7035.2836, subp. 11(B)(10), requires the windrow to be maintained at 55 degrees

³¹⁴ SONAR at 40.

³¹⁵ Public Comment 12.

Celsius for a set number of days, and asserted that daily temperature measurements are necessary to ensure the temperatures are maintained in compliance with the rule.³¹⁶

262. The Shakopee Mdewakanton Sioux Community asserted that the requirement in the proposed rule that "each time temperature is measured, it must be measured before turning the pile and after turning the pile" is ambiguous, and asked for clarification.³¹⁷

263. In response, the MPCA clarified that the requirement in the proposed rules that temperature be measured before and after turning does not need to be in addition to the daily temperature measurements. It indicated the daily temperature measurements can be coordinated with turning to minimize the number of times the temperature is measured. The Agency further indicated that facility operators must be aware of the temperature in order to ensure that the compost process is proceeding as designed and asserted that, if temperatures were not recorded at least daily, neither the facility nor the agency would be able to assess compliance with the temperature performance standards.³¹⁸

264. The Agency agreed that changes to the language of subitem 10 were necessary to clarify its intent and, in its initial post-hearing response, proposed the following additional revision to subitem 10:

(10) Compost must be produced by a process to further reduce pathogens (PFRP). The owner or operator must monitor and record the temperature and retention time for the material being composted each working day until PFRP is achieved and weekly thereafter. Each time a windrow is turned, the temperature is must be measured, it must be measured no more than 4 hours before turning the pile windrow and no more than 24 hours after turning the windrow pile. Acceptable methods of PFRP are described in units (a) to (c).

265. The MPCA has shown that this provision, as modified, is needed and reasonable to describe basic PFRP requirements. The modification was made in response to public comment and serves to clarify the time and temperature requirements. The revision does not render the rules significantly different from the rules as originally proposed.

266. Proposed Subpart 11(B)(10) goes on to describe three acceptable methods of PFRP. These provisions are described below.

Subpart 11(B)(10)(a) Windrow Method

267. As originally proposed, the description of the windrow method in the rules included a requirement that the base of each windrow must include a minimum of

³¹⁶ MPCA's Initial Response at 26.

³¹⁷ Public Comments 1 and 98.

³¹⁸ MPCA's Initial Response at 27.

twelve inches of porous materials, as well as a directive that the windrow must be turned at least once every three to five days.

268. Several individuals and organizations commenting on the proposed rules, including the Shakopee Mdewakanton Sioux Community and Coker Composting and Consulting, objected to the requirement in the proposed rules that a windrow composting site must turn the material every three to five days. They expressed concern that the proposed turning frequency would reduce the temperature of the compost pile at inappropriate times and make it difficult to meet PFRP. The Shakopee Mdewakanton Sioux Community argued that windrows should not be turned as frequently as required by the proposed rules under certain circumstances, such as when the difference between air temperature and the dew point is less than ten degrees; when “strongly odiferous products” such as animal carcasses are in the windrow; or during periods of very cold weather, when turning will kill the microbes in the windrow that create the heat to meet PFRP requirements. It indicated that site managers can more effectively maintain aerobic conditions within the windrow by using an oxygen meter to track oxygen levels within the windrow core and adjusting the ratio of materials accordingly. As a result, it recommended that the proposed rules be revised to simply require that a temperature of 55 degrees Celsius be maintained in the windrow for at least fifteen days and the windrow be turned five times during that period.³¹⁹

269. Coker Composting and Consulting recommended that the requirement for turning windrows every three to five days be eliminated, and that the rule simply require that there be at least five turnings of the windrow during the period when the compost is maintained at 55 degrees or higher.³²⁰

270. The Shakopee Mdewakanton Sioux Community, Coker Composting and Consulting, and several others commenting on the proposed rules also disagreed with the requirement for twelve inches of porous materials at the base of a windrow and urged that the rules be modified to delete that requirement. They expressed concern about the availability and cost of such materials and their effect on aerobic conditions within the windrow.³²¹

271. At the hearing, the Agency announced that it was revising item B, subitem 10, unit a, as follows:

The windrow method for reducing pathogens consists of an unconfined composting process involving periodic aeration and mixing. Construction of each windrow must incorporate ~~include a minimum of 12 inches of porous materials at the base of the windrow~~ that promotes aerobic conditions within the windrow. ~~Blended source separated organic materials may be placed on top of the porous material to a maximum height of~~ Windrow height must not exceed 12 feet. Aerobic conditions must be maintained during the compost process. A temperature of 55

³¹⁹ Public Comment 1.

³²⁰ Public Comment 12.

³²¹ See, e.g., Public Comments 1 and 12.

degrees Celsius must be maintained in the windrow for at least 15 days. The windrow must be turned at least once every three to five days unless approved otherwise by the commissioner as part of an operations plan due to extreme cold weather conditions.³²²

The Agency explained in its post-hearing submission that it had decided to delete the requirement that twelve inches of porous material be used at the base of the windrow because a number of viable strategies beyond that requirement could be used to ensure aerobic conditions and appropriate porosity.³²³

272. In testimony during the rule hearing, Doug Johnson spoke on behalf of the Minnesota Composting Council. He expressed support of the Agency's decision to remove the original requirement that there be twelve inches of mulch at the base of the windrow. He and others commenting on the proposed rules recommended, however, that the reference to "extreme cold" be stricken from the proposed rule revision because atmospheric conditions other than extreme cold could warrant a change in the turning schedule.³²⁴

273. In its initial post-hearing response, the MPCA asserted that a three- to five-day timeframe is needed to ensure that operators do not turn material too frequently, primarily because material turned too frequently would not be held in the high temperature core of the windrow for three consecutive days as required by PRFP. It maintained that the proposed provisions relating to windrow turning are consistent with the PFRP requirements and declined to modify this portion of the rule language.³²⁵

274. The Agency did, however, make a further revision in response to the comments objecting to the reference to "extreme cold weather conditions" in its initial proposed revision. The MPCA indicated that it was revising the last sentence of subitem (a) to state: "A temperature of 55 degrees Celsius must be maintained in the windrow for at least 15 days. The during which the windrow must be turned at least once every three to five days, unless otherwise approved by the commissioner in the operation and maintenance manual due to defined weather conditions."³²⁶ According to the Agency, this revision will allow facility operators, through their operation and maintenance manual, to obtain more flexibility regarding when they turn the windrow. Under the revision, the facility's operations and maintenance manual must identify defined weather conditions when it would be necessary to deviate from the typical three- to five-day turning schedule. For example, the MPCA noted that a compost operator could include provisions in its manual that would allow turning to be delayed in the event of extreme cold or on days when wind speed and direction could carry odors to compost facility neighbors. The MPCA also added language to clarify that the 15-day time frame and associated turning requirements start on the first day that the windrow

³²² Agency Ex. 13.

³²³ MPCA's Initial Response at 28.

³²⁴ Tr. at 59 (Morning Session).

³²⁵ MPCA's Initial Response at 28.

³²⁶ See Attachment 2 to MPCA's Initial Response.

reaches 55°C. The Agency noted that the turning requirement would no longer apply after the conclusion of the fifteen days.³²⁷

275. Thus, as finally proposed for adoption, subitem 10(a) would include the following language pertaining to the windrow method for reducing pathogens:

(a) the windrow method for reducing pathogens consists of an unconfined composting process involving periodic aeration and mixing. Construction of each windrow must incorporate ~~include a minimum of 12 inches of porous materials at the base of the windrow~~ that promotes aerobic conditions within the windrow. ~~Blended source-separated organic materials may be placed on top of the porous material to a maximum height of~~ Windrow height must not exceed 12 feet. Aerobic conditions must be maintained during the compost process. A temperature of 55 degrees Celsius must be maintained in the windrow for at least 15 days. The during which the windrow must be turned at least once every three to five days, unless otherwise approved by the commissioner in the operation and maintenance manual due to defined weather conditions.

276. The MPCA has demonstrated that subpart 11(B)(10)(a), as modified by the Agency, is needed and reasonable to describe the windrow method for reducing pathogens. The modifications were made in response to the comments that were received during the rulemaking process and clarify the provisions of the rules. The rule as finally proposed is not substantially different than the rule as originally published in the State Register.

Subpart 11(B)(10)(b) Static Aerated Windrow Method

277. For facilities using the static aerated windrow method for reducing pathogens, the proposed rules require, among other things, that the temperature of the compost pile be maintained at 55 degrees Celsius for at least seven days.

278. Coker Composting and Consulting suggested that the time requirement set forth in the proposed rule be modified to require that temperatures of **about** 55 degrees Celsius be maintained for three days rather than seven days. It indicated that aerated static pile compost piles do, in fact, maintain those temperatures for periods longer than seven days, but asserted that requiring the seven-day period in the rules “removed operational flexibility.”³²⁸

279. The MPCA responded that the PFRP requirements cited by Coker Composting and Consulting relate to the disposal of sewage sludge, and noted that it previously established separate PFRP requirements for solid waste.³²⁹ The Agency asserted that the language of the proposed rules relating to time and temperature

³²⁷ MPCA’s Initial Response at 28-29.

³²⁸ Public Comment 12.

³²⁹ MPCA’s Initial Response at 29; see Minn. R. 7035.2836, subp. 5(l)(1)-(3) (operation requirements for solid waste compost facilities).

requirements for the windrow method, the static aerated windrow method, and the enclosed vessel method for reducing pathogens merely carry forward existing requirements that are already in its rules³³⁰ The SONAR in this proceeding noted that the Agency was limiting its discussions to the modifications that were made in the proposed rules under consideration, and indicated that the rationale for the PFRP standards that are being carried forward from its existing rules could be found in the February 23, 1988, SONAR issued with respect to the existing PFRP requirements for solid waste.³³¹ The MPCA stated in its initial post-hearing comments that the 1988 SONAR is available on request from the MPCA.³³²

280. The MPCA's existing rules relating to operation requirements for solid waste compost facilities require the same time and temperature requirements for facilities using the "static aerated pile method" as the proposed rules. See Minn. R. 7035.2836, subp. 5(l)(2). The Agency explained in the current SONAR that the proposed rules carried forward the existing requirements with respect to SSOM compost facilities, and limited its discussion to modifications that were made in the proposed rules. There has been no convincing demonstration that it is improper to follow the same approach in the proposed rules. The Administrative Law Judge concludes that there has not been an adequate showing that the proposed rules are defective because they continue the time and temperature requirements that were previously established and are included in the current rules for the static aerated method. This proposed rule provision has otherwise been shown to be needed and reasonable, and there are no impediments to its adoption.

Subpart 11(B)(10)(c) Enclosed Vessel Method

281. For facilities using the enclosed vessel method for reducing pathogens, the proposed rules require, among other things, that the retention time in the vessel must be at least 24 hours with the temperature maintained at 55 degrees Celsius; a stabilization period of at least seven days must follow the enclosed vessel retention; and temperature in the compost pile must be maintained at least at 55 or more degrees Celsius for three days during the stabilization period.

282. Coker Composting and Consulting proposed alternative language relating to the time periods and temperature levels for stabilization of material composted in an enclosed vessel. It complained that the Agency is relying on its February 23, 1988, SONAR to justify the approach taken in the proposed rules and asserted that that SONAR is no longer available.³³³

283. As noted in Findings 279 and 280 above, the MPCA indicated in the SONAR applicable to the current proceeding that the language of the proposed rules relating to PRFP standards for the enclosed vessel method for reducing pathogens merely carried forward existing requirements in the rules. It limited the comments in the

³³⁰ MPCA's Initial Response at 29, SONAR at 40-42.

³³¹ SONAR at 40-41.

³³² MPCA's Initial Response at 29.

³³³ Public Comment 12.

current SONAR to the discussion of modifications that were made in the current proceeding, and stated that its February 23, 1988, SONAR otherwise provides support for these provisions.³³⁴ The MPCA emphasized in its post-hearing response that the 1988 SONAR is available upon request.³³⁵

284. The MPCA's current rules relating to operation requirements for solid waste compost facilities using enclosed vessel method require the same time and temperature requirements as the proposed rules. See Minn. R. 7035.2836, subp. 5(l)(3). The Agency explained in the current SONAR that the proposed rules carried forward the existing requirements with respect to SSOM compost facilities, and limited its discussion to modifications that were made in the proposed rules. There has been no convincing demonstration that it is improper to impose the same standards in the proposed rules as appear in the current rules. The Administrative Law Judge concludes that there has not been an adequate showing that the proposed rules are defective because they continue the time and temperature requirements for the enclosed vessel method that were previously established and are included in the current rules.

Subpart 11(B)(11) - Mercury and polychlorinated biphenyls

285. Subitem 11 of the proposed rules requires compliance with subpart 5, item J of the existing rules, which includes a requirement that finished compost be tested for concentrations of mercury and polychlorinated biphenyls (PCBs). The proposed rules specify that the owner or operator may request removal of mercury and PCB test sampling and testing requirements based on five years of sampling batch data which demonstrates "non-detect" results for those constituents.³³⁶

286. In the SONAR, the MPCA indicated that it has been receiving test data from finished compost for more than twenty years and thus far mercury has not been detected in any of the finished compost that has been tested. The MPCA noted, however, that PCBs were detected on one occasion in 2009 in finished compost, after a compost facility (later identified as the Swift County Compost/Recycling Facility) accepted mash from an ethanol plant that had capacitors leaking PCB-containing oil.³³⁷ Because mercury has never been found in finished compost and PCBs have been found on only one occasion, the MPCA noted that it believes the testing for these substances could be waived after five years of sampling and testing if the facility is able to demonstrate that these substances have not been present during that time period. The Agency also noted that the proposed rules require the pretesting of any new feedstocks that are proposed to be composted at a facility to ensure that feedstocks that may be contaminated with these or other constituents will not be accepted.³³⁸

³³⁴ SONAR at 40-41.

³³⁵ MPCA's Initial Response at 30.

³³⁶ See existing Minn. R. 7035.2836, subps. 5-6.

³³⁷ SONAR at 42; MPCA's Initial Response at 41.

³³⁸ SONAR at 42.

287. Specialized Environmental Technologies suggested that finished compost be required to be tested using the US Composting Council Seal of Testing Assurance program or another product quality assurance program approved by the US Composting Council.³³⁹

288. Morrison County, Lyon County, and Crow Wing County noted that the proposed rules do not require SSOM compost facilities to conduct testing for perfluorochemicals (PFCs). They pointed out that the MPCA recently mandated such testing in landfill leachate and groundwater monitoring. They asserted that PFCs are common in packaging, such as milk cartons and popcorn bags, which often end up in source-separated organic materials, and urged the MPCA to be consistent in requiring testing for PFCs.³⁴⁰

289. Carver County was critical of the MPCA's reliance on data that was "arbitrarily" selected from the 2014 Carver County Project to support its position that organics contact water presents various concerns. It indicated that the Project Team working on the Carver County Project "has evaluated the limited data and made the determination that PFC data demonstrates there are minimal environmental issues related to contact water generated from compost sites." It further asserted that the PCB contamination cited by the MPCA actually occurred in 2002 at a MSW composting facility, but the MPCA did not become aware of it until 2009. Carver County also contended that the source of PFCs is incoming yard waste and not SSOM, and suggested that the requirement to test finished compost for mercury and PCBs "should be tied to scientific data that would indicate the presence of these compounds in the incoming feedstocks that would thus result in their presence in the finished compost."³⁴¹

290. Based upon his review of preliminary raw data from the Carver County Project, Dr. Feng Xiao, a Postdoctoral Scientist in the Department of Environmental Sciences at the Connecticut Agricultural Experiment Station, noted that most PFCs analyzed were below the detection limit in soil, compost, and in the sand and gravel pad contact water samples. He indicated that concentrations of several PFCs were measured in grass and tree leaves. He did not know the exact sample collection methods that were used, the specific lab and testing protocols that were followed, or whether the reported PFCs were dissolved in the water or found in sediments. Dr. Xiao stated that he is not aware of studies observing PFCs in tree leaves and grass, but indicated that there are several possible mechanisms and pathways explaining how PFCs may end up in vegetation. He suggested that the Agency conduct additional studies, and stated that more data from larger experiments relating to PFCs were required to be able to conduct a statistical analysis and identify possible hotspots.³⁴²

291. In its post-hearing responses, the MPCA asserted that the finished compost testing required under the proposed rule is adequate for the intended purpose of determining the quality of the compost produced. The Agency indicated that requiring

³³⁹ Public Comment 70.

³⁴⁰ Public Comments 34, 42, and 81.

³⁴¹ Public Comments 101 and 112.

³⁴² Public Comment 100.

other tests, such as those recommended by Morrison, Lyon, and Crow Wing Counties, will impose additional operating costs. It further noted that some facilities are already doing the recommended test on their own for marketing purposes. The Agency reiterated that the PCB testing requirement in the proposed rules is designed to prevent a recurrence of the situation experienced by the Minnesota composting facility that ended up with finished compost with high levels of PCBs after accepting PCB-contaminated corn for composting without testing its feedstock. The Agency further indicated that the mercury test requirement is contained in the existing MMSW composting rules and has been carried over into the proposed SSOM rules. The MPCA emphasized that there is a provision in the proposed rule which will allow the owner or operator to request the removal of requirements to sample and test for mercury and PCBs based on five years of sampling with “nondetect” results.³⁴³

292. The Agency did not propose any modification to the proposed rules in response to the comments recommending PFC testing. The Agency indicated that, during an MPCA survey of landfill leachate, PFCs were found to be present in the leachate, sometimes at levels well over the state’s Health Risk Limits. As a result, landfills that use land treatment of leachate systems are required to sample for PFCs in their leachate at least twice per year. The MPCA noted that, during sampling conducted in 2012 as part of the 2014 Carver County project, PFCs were detected in four of five sheet flow samples taken down-gradient from yard waste and SSOM compost windrows. PFCs were also observed in water samples collected in 2013 from all three of the lined test pads. The PFC congener that had the highest concentration for the compost liner study was perfluorobutanesulfonic acid (PFBS), which was found at a concentration of 254 ng/L. According to the MPCA, this concentration “is greater than an order of magnitude under the [state’s Health Risk Limits], and if it was landfill leachate it would be well below the threshold for further sampling at spray site monitoring wells.”³⁴⁴

293. The Administrative Law Judge concludes that the Agency has shown the need for and reasonableness of the mercury and PCB testing requirements in the proposed rules. It has provided a sufficient explanation of the evidence on which it is relying and how the evidence connects rationally with the approach it has chosen to take in the proposed rules, as required by applicable case law.³⁴⁵ It has also given a rational explanation for its decision that PFC testing should not be required. It is clear that others find existing data to be inconclusive, draw different conclusions from available data, or believe that there is a greater or a lesser risk posed to human health and the environment than the Agency. However, it is not the proper function of the Administrative Law Judge to decide which approach is “best” or otherwise invade the policy-making discretion of the Agency. The choice made by the MPCA is one that a rational person could have made, and is not arbitrary or unreasonable.

294. Accordingly, the Administrative Law Judge finds that the Agency has adequately demonstrated the need for and reasonableness of subitem 11.

³⁴³ MPCA’s Initial Response at 30.

³⁴⁴ *Id.* at 32 (emphasis in original).

³⁴⁵ *Manufactured Hous. Inst. v. Pettersen*, 347 N.W.2d at 244.

Subpart 11(B)(12) – Odor management plan

295. Subitem 12 of the proposed rules requires owners or operators of SSOM compost facilities to "develop and maintain an odor management plan detailing the best management practices (BMPs) to be used during normal operations to prevent odors." The proposed rules specify that the plan must: (1) include BMPs that address how the oxygen levels and porosity will be managed to minimize odors; (2) detail how the facility will handle odor complaints and "the steps that would go beyond normal operations should the facility receive persistent complaints"; and (3) "address BMPs to minimize odor generation in the mixing and tipping areas, active compost processing areas, and contact water and storm water ponding areas."

296. In the SONAR, the Agency indicated that odor issues have been the most persistent problem that has occurred during the more than 25 years that composting has been occurring in Minnesota. Because the lack of porous materials to create space for oxygen within a windrow is the most common reason for the creation of odors, the proposed rules specifically require that the facility's odor management plan indicate how the BMPs will address porosity within the windrow and the resulting oxygen levels. According to the SONAR, should the facility have "persistent odor complaints, this provision requires that facility [sic] go beyond detailing the normal operating practices and discuss how the facility will manage those persistent odor complaints." The SONAR acknowledged that it is likely that all facilities will have occasional odor complaints and an odor management plan would likely address those situations. However, the Agency stated that, "should the complaints be persistent, operational changes in the revised odor management plan may be required to address the odor issues." The SONAR indicates that the odor management plan "must address the occasional odor complaint, as well as provide guidance to facility staff if those odor complaints become persistent." According to the MPCA, this provision will be "critical in the success of the composting industry."³⁴⁶

297. The Shakopee Mdewankanton Sioux Community expressed concerns about the odor management plan requirement contained in the proposed rules. It asserted that a compost site will never be able to "prevent" odors as suggested in the first sentence of the proposed rule, and suggested that the rule instead consistently require that odors be "minimized" and include a basic odor standard. It also argued that the threshold for a facility to take further action should not be "persistent complaints" because this does not account for the possibility that "persistent complainers" who are "sensitive and have the time and energy to complain" will create a misleading impression that the facility has an odor problem. It noted that half of the 250 complaints that it has received in the past 20 months came from only three residents.³⁴⁷

298. In response, the MPCA indicated that it had repealed odor standards set forth in Minnesota Rules Chapter 7011 in 1992, and that later efforts to adopt a statewide odor rule were not successful. As a result, Minnesota currently does not have

³⁴⁶ SONAR at 42.

³⁴⁷ Public Comment 1.

odor standards for any facility type. The MPCA indicated generally that all solid waste facilities "are required to operate in a manner that minimizes and eliminates nuisance conditions beyond its property line."³⁴⁸

299. The record in this matter does not contain any facts or information that would provide a proper basis for developing a specific odor standard applicable to SSOM facilities. Moreover, the Administrative Law Judge concludes that any attempt by the Agency to modify the proposed rules to include such a standard would exceed the announced scope of the proposed rules and constitute a substantial change from the rules as originally proposed. Accordingly, the rules are not defective because they fail to include such a standard.

300. The language of this subitem is, however, defective in two other ways. First, the Agency has not shown that it is needed and reasonable to refer in the first sentence to the facility's obligation to develop an odor management plan setting forth the BMPs that will be used during normal operations to "prevent" odors. Given the nature of SSOM composting operations, there is no evidence that it is realistic or reasonable to expect a facility to develop a plan to "prevent" odors. In fact, the remainder of the proposed rule requires that facilities manage oxygen levels and porosity to "minimize" odors, and states that the facility's plan must address BMPs to "minimize" odor generation in the mixing and tipping areas, active compost processing areas, and contact water and storm water ponding areas. To correct this defect, the Administrative Law Judge suggests that "minimize" be substituted for "prevent" in the first sentence of the rule.

301. Second, the rule is unduly vague in describing what a facility must do to satisfy the directive in the third sentence requiring a facility to detail, in its odor management plan, "the steps that would go beyond normal operations should the facility receive persistent complaints." To correct this defect, the Administrative Law Judge suggests that the Agency add more specific language regarding what number or frequency or source of complaints will be deemed to constitute "persistent" complaints and clarify what is meant by "the steps that would go beyond normal operations." Based on the record in this matter, it is difficult to suggest specific language to cure this defect. Perhaps the Agency could modify the third sentence of the rule along the lines of the following: "~~The plans must detail how the facility will handle odor complaints and the steps that would go beyond normal operations should the facility receive persistent complaints~~ specific measures and safeguards it will employ in addition to normal operating procedures to address persistent complaints, i.e., situations in which the facility receives more than [insert number] complaints of excessive odor per month from one or more individuals." Such a modification would clarify the requirements of the rule and would not amount to a substantial change.

302. Assuming that the rule is modified in a manner similar to that suggested above to correct the defects, the proposed rules will have been shown to be needed

³⁴⁸ MPCA's Initial Response at 31.

and reasonable to describe odor management plan responsibilities applicable to SSOM facilities.

Subpart 11(B)(13) – Personnel training program

303. Under subitem 13 of the proposed rules, owners or operators of SSOM compost facilities must develop a personnel training program that incorporates several requirements. Among other things, the proposed rules require that employees receive an initial twenty-four hours of training within twelve months of hire and five contact hours of training on an annual basis. The proposed rules indicate that the Commissioner shall grant approval of the personnel training program if its content includes topics such as the compost process, composting methods, facility operations, odor control, source-separated organic materials management, or other topics related to the best management practices of operating a compost facility.

304. Several members of the public filed comments pertaining to subitem 13. Brenda Wilcox suggested that the proposed rules be revised to require that the operator or manager of a compost facility have a degree in organic chemistry and that the facility must have educated personnel on-site twenty-four hours a day to monitor the condition of the compost.³⁴⁹ Sandra Speck asserted that numerous problems arise from a lack of trained and experienced staff on-site, and contended that the closest neighbors to the facility seem to be the ones who monitor compliance with the rules.³⁵⁰ Coker Composting and Consulting requested that the list of accredited training courses and educational activities be expanded to include improved training providers who can offer on-site training courses at solid waste composting facilities.³⁵¹ The Shakopee Mdewakanton Sioux Community suggested that the rule require separate tracks of skills training for facility managers and facility operators. It recommended that the rules require facility managers to take a forty-hour course conducted by the US Composting Council and an additional four contact hours of training each year, and operators to take eight hours of compost operator training and a two-hour refresher course each year. It further suggested that the rules require a manager to be on duty or able to reach the site within one hour at all times that the facility is open for business.³⁵²

305. In response to these comments, the MPCA expressed its view that the requirements imposed under items A and B of the proposed rules—which specify that the facility’s operation and maintenance manual must describe its personnel training program and that the manual must be submitted to the Commissioner for approval—are sufficient to ensure that the facility will be operated by properly-trained personnel. The MPCA indicated that the SSOM rules contain more training and operator requirements than the existing MMSW composting rules, and also require that properly qualified personnel be on site when necessary. It also stated that the MPCA permitting and compliance staff will follow up on complaints and take action if the complaints are substantiated, and noted that Agency staff may modify permit conditions if there are

³⁴⁹ Public Comment 29.

³⁵⁰ Public Comment 99.

³⁵¹ Public Comment 12.

³⁵² Public Comment 1.

persistent complaints. The Agency declined to modify the proposed rules to set particular academic background requirements or require round-the-clock staffing. Because not all facilities will have multiple tiers of management or employment, the Agency believes it is not warranted to adopt varying training standards for operators and managers. The MPCA further noted that the training requirements established under the proposed rule do not preclude on-site training courses, and indicated that such courses may be acceptable as an accredited course or approved educational activity as long as they cover the topics defined in the proposed rules and facility personnel satisfy the requirements for contact hours.³⁵³

306. The Administrative Law Judge concludes that the Agency has demonstrated that subpart 13 of the proposed rules is needed and reasonable to describe the personnel training program that must be developed by SSOM facilities. The proposed rules are not defective because they fail to address the areas suggested by those who filed comments.

Based on the Findings of Fact, the Administrative Law Judge makes the following:

CONCLUSIONS OF LAW

1. The Agency gave proper notice of the hearing in this matter. The Agency has fulfilled the procedural requirements of Minn. Stat. § 14.14 and all other procedural requirements of law or rule.

2. The Agency has demonstrated its statutory authority to adopt the proposed rules, and has fulfilled all other substantive requirements of law or rule within the meaning of Minn. Stat. §§ 14.05, subd. 1; 14.15, subd. 3; and 14.50 (i) and (ii), except as noted in Findings 189, 200, 212, 252, and 301.

3. The Agency has demonstrated the need for and reasonableness of the proposed rules by an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14, subd. 4; and 14.50 (iii), except as noted in Findings 189, 210, 251, and 300.

4. The Administrative Law Judge has suggested action to correct the defects cited in Conclusions 2 and 3, as noted in Findings 189, 200, 210, 212, 253, 300, and 301.

5. Due to Conclusions 2 and 3, this Report has been submitted to the Chief Administrative Law Judge for her approval pursuant to Minn. Stat. § 14.15, subd. 3.

6. Any Findings that might properly be termed Conclusions and any Conclusions that might properly be termed Findings are hereby adopted as such.

³⁵³ MPCA's Initial Response at 31, 37.

7. A Finding or Conclusion of need and reasonableness with regard to any particular rule subsection does not preclude and should not discourage the Agency from further modification of the proposed rules based upon this Report and an examination of the public comments, provided that the rule finally adopted is based on facts appearing in this rule hearing record.

Based on the Conclusions of Law, the Administrative Law Judge makes the following:

RECOMMENDATION

IT IS RECOMMENDED that the proposed rules, as modified, be adopted, except where otherwise noted above.

Dated: June 16, 2014

s/Barbara L. Neilson

BARBARA L. NEILSON
Administrative Law Judge